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ABSTRACT

This document presents revised comprehensive standards and guidelines for the preparation and certification of special educators and for practice as special educators, developed by the Council for Exceptional Children (CEC). Part 1 provides the CEC's Code of Ethics for Professional Practice for Educators of Persons with Exceptionalities and CEC's Standards for Professional Practice. Part 2 presents the CEC's International Standards for Entry into Professional Practice. Standards for knowledge and skills essential for all beginning special education teachers are outlined first, followed by knowledge and skills for special education teachers working with students with hearing impairments, emotional and behavior disorders, gifts or talents, learning disabilities, mental retardation and developmental disabilities, visual impairments, and physical and health disabilities. The knowledge and skills needed for early childhood programs are also outlined. Part 3 provides guidelines for CEC approval of special education professional preparation programs in the same areas. The items in Parts 2 and 3 are coded by area, topic, and knowledge or skill in order to provide a framework for creating a searchable database of knowledge and skills items. Space is provided next to each item for citing course numbers or other descriptions of where the knowledge or skill is covered in a curriculum or continuing education program. (CR)

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What Every Special Educator Must Know:

The International Standards for the Preparation and Certification of Special Education Teachers

Second Edition

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The Council for Exceptional Children

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The Council for Exceptional Children

CEC: Leading the Way

The Council for Exceptional Children (CEC) is the largest professional organization internationally committed to improving educational outcomes for individuals with exceptionalities. CEC accomplishes its worldwide mission on behalf of educators and others working with children with exceptionalities by advocating for appropriate government policies; setting professional standards; providing continuing professional development; and assisting professionals to obtain conditions and resources necessary for effective professional practice.

CEC: The Unifying Force of a Diverse Field

The Council for Exceptional Children, a private nonprofit membership organization, was established in 1922. CEC is an active network of 59 State/Provincial Federations, 900 Chapters, 17 Specialized Divisions, and 275 Subdivisions with reach in over 40 countries.

The Council for Exceptional Children is a major publisher of special education literature and produces a comprehensive catalog semiannually. Journals such as *TEACHING Exceptional Children* and *Exceptional Children* and a newsletter, *CEC Today* reach over 100,000 readers and provide a wealth of information on the latest teaching strategies, research, resources, and special education news.

CEC is pleased to provide the profession with this revised set of comprehensive standards and guidelines for the preparation and certification of special educators and for our practice as special educators. No other profession in the field of education has defined itself so completely.

The Council for Exceptional Children
1920 Association Drive • Reston, Virginia 20191
703/620-3660 (Voice)
703/264-9446 (TTY)
703/264-9494 (FAX)

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The International Standards for the Preparation and Certification of Special Education Teachers

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Preface

As the international professional association of special educators, The Council for Exceptional Children is pleased to provide the profession with this revised set of comprehensive standards and guidelines for the preparation and certification of special educators and for our practice as special educators. No other profession in the field of education has defined itself so completely.

This second edition contains revisions adopted by CEC in May 1996. The first edition, published in the fall of 1995, received strong professional and public support. As the field began using the standards, a number of suggestions were offered on how they could be improved. The CEC Professional Standards and Practice Standing Committee and its Subcommittees reviewed all comments and adopted a number of technical and clarifying amendments to the common core and specialization knowledge and skills and the institutional and program requirements contained in Section III. The overviews of Parts II and III were also revised to answer a number of questions raised by the field. Work is progressing on the development of additional areas of specialization, and it is expected that these will be available next year.

This collaborative effort of members of CEC in the United States and Canada, its Divisions, and others reflects our belief that standards for the profession should emanate from the field and represent the wide diversity of the field. The thousands of special educators and others who served on committees, subcommittees, and working groups and responded to exhaustive surveys gave freely of their knowledge and time to develop and validate these standards and guidelines. They deserve the credit for this significant achievement.

The following standards have been developed to guide our profession into the next millennium. They are premised on a view that special educators are members of an international profession, and as such are prepared to practice in a manner consistent with the knowledge, skills, and standards of the profession. As qualified professionals, special educators should be able to practice across governmental jurisdictions with minimal constraint while they continue to acquire new knowledge and skills to advance their qualifications and practice.

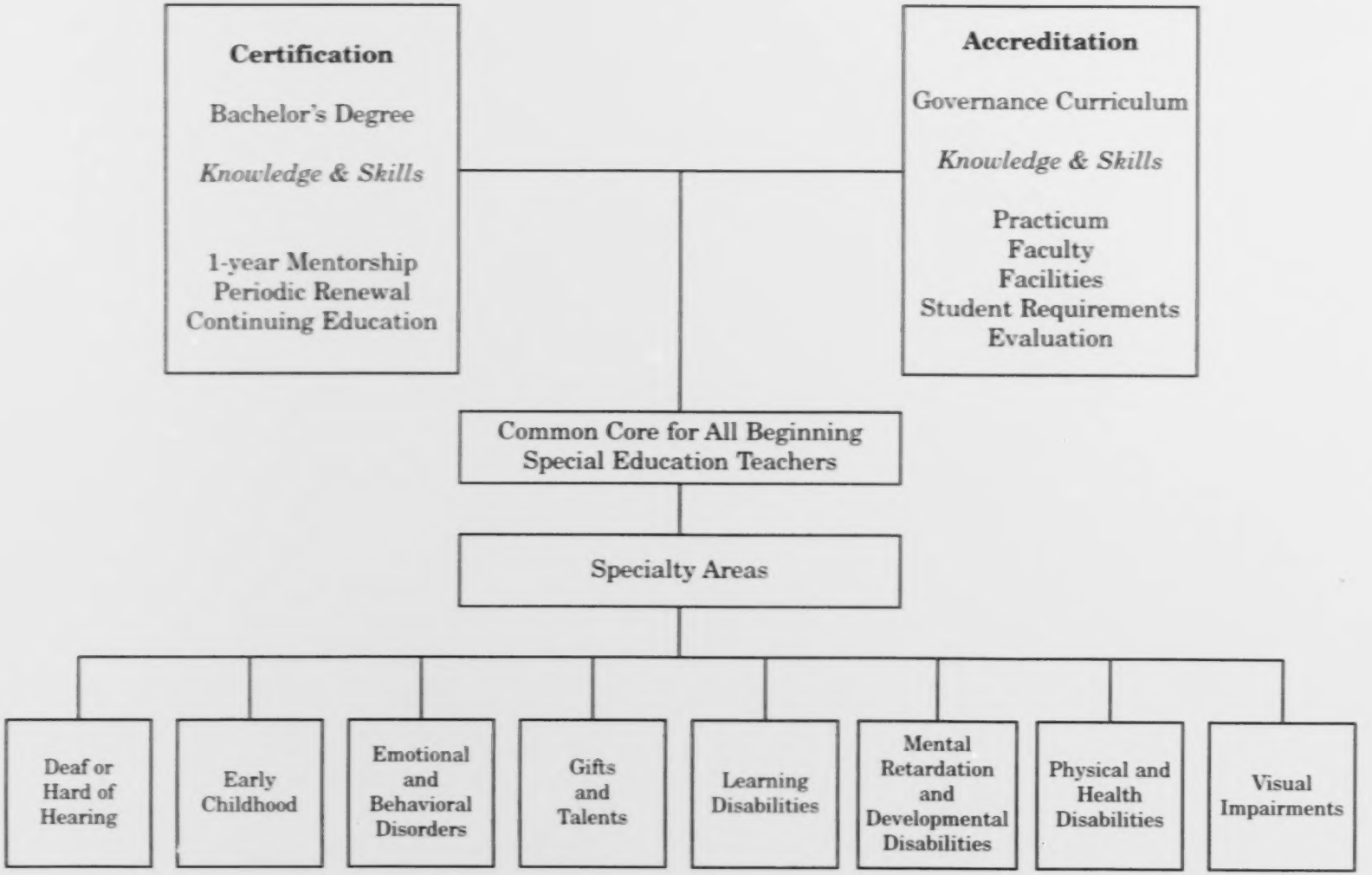
While we recognize that policies, curricula, and program approaches vary across national borders, we believe that most of the minimum standards set forth in this publication represent universal constructs that can be meaningfully adapted across nations.

This resource is divided into three sections. Part I includes The Council for Exceptional Children's Code of Ethics and Standards for Professional Practice for Educators of Persons with Exceptionalities. This section provides general guidance for professional conduct. Part II is designed as a reference for states and provinces in determining certification requirements for entry into the profession. It presents The Council for Exceptional Children's International Standards for Entry into Professional Practice, and is coded to facilitate easy reference for each knowledge and skill item. Part III is designed for use by special education professional preparation programs in colleges and universities and state agencies that accredit such institutions. The guidelines presented have been adopted and are used by the National Council for the Accreditation of Teacher Education (NCATE). The items in Parts II and III are coded by area, topic, and knowledge or skill. For example, **CC:** Common Core, **2.** Characteristics of Learners, **K1** first knowledge item, can be referred to as **CC:2.K1**. This flexible system of coding will allow new areas, topics, and items to be added as additional standards are developed. The system also provides a framework for creating a searchable database of knowledge and skills items. In Part III, space is provided next to each item for citing course numbers or other descriptions or examples of where the knowledge or skill is presented in the curriculum. States, provinces, and school districts are also finding this format useful for noting workshops or other continuing education activities that support specific items.

Standards are merely a first step. To make them a reality will require a partnership among the profession, governmental bodies, schools and other agencies that employ special educators and institutions of higher education. As CEC begins its 75th anniversary of serving the special education profession and children with exceptionalities and their families, we look forward to working with our partners to make these standards a reality.

The Council for Exceptional Children
1996

CEC Special Education Standards for Certification and Accreditation



Part I

CEC Code of Ethics and Standards for Professional Practice for Educators of Persons with Exceptionalities

CEC Code of Ethics for Educators of Persons with Exceptionalities

We declare the following principles to be the Code of Ethics for educators of persons with exceptionalities. Members of the special education profession are responsible for upholding and advancing these principles. Members of The Council for Exceptional Children agree to judge and be judged by them in accordance with the spirit and provisions of this Code.

A. Special education professionals are committed to developing the highest educational and quality of life potential of individuals with exceptionalities.

B. Special education professionals promote and maintain a high level of competence and integrity in practicing their profession.

C. Special education professionals engage in professional activities which benefit individuals with exceptionalities, their families, other colleagues, students, or research subjects.

D. Special education professionals exercise objective professional judgment in the practice of their profession.

E. Special education professionals strive to advance their knowledge and skills regarding the education of individuals with exceptionalities.

F. Special education professionals work within the standards and policies of their profession.

G. Special education professionals seek to uphold and improve where necessary the laws, regulations, and policies governing the delivery of special education and related services and the practice of their profession.

H. Special education professionals do not condone or participate in unethical or illegal acts, nor violate professional standards adopted by the Delegate Assembly of CEC.

Originally adopted by the Delegate Assembly of The Council for Exceptional Children in April 1983.

CEC Standards for Professional Practice

Professionals in Relation to Persons with Exceptionalities and Their Families.

Instructional Responsibilities

Special education personnel are committed to the application of professional expertise to ensure the provision of quality education for all individuals with exceptionalities. Professionals strive to:

(1) Identify and use instructional methods and curricula that are appropriate to their area of professional practice and effective in meeting the individual needs of persons with exceptionalities.

(2) Participate in the selection and use of appropriate instructional materials, equipment, supplies, and other resources needed in the effective practice of their profession.

(3) Create safe and effective learning environments which contribute to fulfillment of needs, stimulation of learning, and self-concept.

(4) Maintain class size and case loads which are conducive to meeting the individual instructional needs of individuals with exceptionalities.

(5) Use assessment instruments and procedures that do not discriminate against persons with exceptionalities on the basis of race, color, creed, sex, national origin, age, political practices, family or social background, sexual orientation, or exceptionality.

(6) Base grading, promotion, graduation, and/or movement out of the program on the individual goals and objectives for individuals with exceptionalities.

(7) Provide accurate program data to administrators, colleagues, and parents, based on efficient and objective record keeping practices, for the purpose of decision making.

(8) Maintain confidentiality of information except when information is released under specific conditions of written consent and statutory confidentiality requirements.

Management of Behavior

Special education professionals participate with other professionals and with parents in an interdisciplinary effort in the management of behavior. Professionals:

(1) Apply only those disciplinary methods and behavioral procedures which they have been instructed to use and which do not undermine the dignity of the individual or the basic human rights of persons with exceptionalities, such as corporal punishment.

(2) Clearly specify the goals and objectives for behavior management practices in the persons' with exceptionalities Individualized Education Program.

(3) Conform to policies, statutes, and rules established by state/provincial and local agencies relating to judicious application of disciplinary methods and behavioral procedures.

(4) Take adequate measures to discourage, prevent, and intervene when a colleague's behavior is perceived as being detrimental to exceptional students.

(5) Refrain from aversive techniques unless repeated trials of other methods have failed and only after consultation with parents and appropriate agency officials.

Support Procedures

(1) Adequate instruction and supervision shall be provided to professionals before they are required to perform support services for which they have not been prepared previously.

(2) Professionals may administer medication, where state/provincial policies do not preclude such action, if qualified to do so or if written instructions are on file which state the purpose of the medication, the conditions under which it may be administered, possible side effects, the physician's name and phone number, and the professional liability if a mistake is made. The professional will not be required to administer medication.

(3) Professionals note and report to those concerned whenever changes in behavior occur in conjunction with the administration of medication or at any other time.

Parent Relationships

Professionals seek to develop relationships with parents based on mutual respect for their roles in achieving benefits for the exceptional person. Special education professionals:

(1) Develop effective communication with parents, avoiding technical terminology, using the primary language of the home, and other modes of communication when appropriate.

(2) Seek and use parents' knowledge and expertise in planning, conducting, and evaluating special education and related services for persons with exceptionalities.

(3) Maintain communications between parents and professionals with appropriate respect for privacy and confidentiality.

(4) Extend opportunities for parent education utilizing accurate information and professional methods.

(5) Inform parents of the educational rights of their children and of any proposed or actual practices which violate those rights.

(6) Recognize and respect cultural diversities which exist in some families with persons with exceptionalities.

(7) Recognize that the relationship of home and community environmental conditions affects the behavior and outlook of the exceptional person.

Advocacy

Special education professionals serve as advocates for exceptional students by speaking, writing, and acting in a variety of situations on their behalf. They:

(1) Continually seek to improve government provisions for the education of persons with exceptionalities while ensuring that public statements by professionals as individuals are not construed to represent official policy statements of the agency that employs them.

(2) Work cooperatively with and encourage other professionals to improve the provision of special education and related services to persons with exceptionalities.

(3) Document and objectively report to one's supervisors or administrators inadequacies in resources and promote appropriate corrective action.

(4) Monitor for inappropriate placements in special education and intervene at appropriate levels to correct the condition when such inappropriate placements exist.

(5) Follow local, state/provincial, and federal laws and regulations which mandate a free appropriate public education to exceptional students and the protection of the rights of persons with exceptionalities to equal opportunities in our society.

Professional Employment

Certification and Qualification

Professionals ensure that only persons deemed qualified by having met state/provincial minimum standards are employed as teachers, administrators, and related service providers for individuals with exceptionalities.

Employment

(1) Professionals do not discriminate in hiring on the basis of race, color, creed, sex, national origin, age, political practices, family or social background, sexual orientation, or exceptionality.

(2) Professionals represent themselves in an ethical and legal manner in regard to their training and experience when seeking new employment.

(3) Professionals give notice consistent with local education agency policies when intending to leave employment.

(4) Professionals adhere to the conditions of a contract or terms of an appointment in the setting where they practice.

(5) Professionals released from employment are entitled to a written explanation of the reasons for termination and to fair and impartial due process procedures.

(6) Special education professionals share equitably the opportunities and benefits (salary, working conditions, facilities, and other resources) of other professionals in the school system.

(7) Professionals seek assistance, including the services of other professionals, in instances where personal problems threaten to interfere with their job performance.

(8) Professionals respond objectively when requested to evaluate applicants seeking employment.

(9) Professionals have the right and responsibility to resolve professional problems by utilizing established procedures, including grievance procedures, when appropriate.

Assignment and Role

(1) Professionals should receive clear written communication of all duties and responsibilities, including those which are prescribed as conditions of their employment.

(2) Professionals promote educational quality and intra- and interprofessional cooperation through active participation in the planning, policy development, management, and evaluation of the special education program and the education program at large so that programs remain responsive to the changing needs of persons with exceptionalities.

(3) Professionals practice only in areas of exceptionality, at age levels, and in program models for which they are prepared by their training and/or experience.

(4) Adequate supervision of and support for special education professionals is provided by other professionals qualified by their training and experience in the area of concern.

(5) The administration and supervision of special education professionals provides for clear lines of accountability.

(6) The unavailability of substitute teachers or support personnel, including aides, does not result in the denial of special education services to a greater degree than to that of other educational programs.

Professional Development

(1) Special education professionals systematically advance their knowledge and skills in order to maintain a high level of competence and response to the changing needs of persons with exceptionalities by pursuing a program of continuing education including but not limited to participation in such activities as inservice training, professional conferences/workshops, professional meetings, continuing education courses, and the reading of professional literature.

(2) Professionals participate in the objective and systematic evaluation of themselves, colleagues, services, and programs for the purpose of continuous improvement of professional performance.

(3) Professionals in administrative positions support and facilitate professional development.

Professionals in Relation to the Profession and to Other Professionals

To the Profession

(1) Special education professionals assume responsibility for participating in professional organizations and adherence to the standards and codes of ethics of those organizations.

(2) Special education professionals have a responsibility to provide varied and exemplary supervised field experiences for persons in undergraduate and graduate preparation programs.

(3) Special education professionals refrain from using professional relationships with students and parents for personal advantage.

(4) Special education professionals take an active position in the regulation of the profession through use of appropriate procedures for bringing about changes.

(5) Special education professionals initiate, support, and/or participate in research related to the education of persons with exceptionalities with the aim of improving the quality of educational services, increasing the accountability of programs, and generally benefiting persons with exceptionalities. They:

  (a) Adopt procedures that protect the rights and welfare of subjects participating in the research.

  (b) Interpret and publish research results with accuracy and a high quality of scholarship.

  (c) Support a cessation of the use of any research procedure which may result in undesirable consequences for the participant.

  (d) Exercise all possible precautions to prevent misapplication or misutilization of a research effort, by self or others.

To Other Professionals

Special education professionals function as members of interdisciplinary teams, and the reputation of the profession resides with them. They:

(1) Recognize and acknowledge the competencies and expertise of members representing other disciplines as well as those of members in their own disciplines.

(2) Strive to develop positive attitudes among other professionals toward persons with exceptionalities, representing them with an objective regard for their possibilities and their limitations as persons in a democratic society.

(3) Cooperate with other agencies involved in serving persons with exceptionalities through such activities as the planning and coordination of information exchanges, service delivery, evaluation, and training, so that duplication or loss in quality of services may occur.

(4) Provide consultation and assistance, where appropriate, to both regular and special educators as well as other school personnel serving persons with exceptionalities.

(5) Provide consultation and assistance, where appropriate, to professionals in nonschool settings serving persons with exceptionalities.

(6) Maintain effective interpersonal relations with colleagues and other professionals, helping them to develop and maintain positive and accurate perceptions about the special education profession.

Originally adopted by the Delegate Assembly of The Council for Exceptional Children in April 1983.

Part II

CEC International Standards for Entry into Professional Practice

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CEC International Standards for Entry into Professional Practice

I. To be qualified to enter into practice as a special education teacher, an individual must possess no less than a bachelor's degree that encompasses the knowledge and skills consistent with the entry level into special education practice.

II. To be qualified to enter into practice as a special education teacher, an individual must possess the knowledge and skills set forth in the *CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers.*

III. To be qualified to enter into practice as a special education teacher, an individual must possess the knowledge and skills set forth in at least one of the *CEC Specialized Knowledge and Skills Essential for Beginning Special Education Teachers.*

IV. Each new professional in special education should receive a minimum of a 1-year mentorship during the first year of his or her professional special education practice in a new role. The mentor should be an experienced professional in the same or a similar role, who can provide expertise and support on a continuing basis.

V. Approval of individuals for professional practice in the field of special education should be for a limited period of time with periodic renewal.

VI. Each professional in the field of educating individuals with exceptionalities (e.g., teachers, supervisors, administrators, college/university faculty) should participate in a minimum of 25 clock hours each year of planned, preapproved, organized, and recognized professional development activities related to his or her field of professional practice. Such activities may include a combination of professional development units, continuing education units, college/university coursework, professional organization service (e.g., in CEC federations and chapters, divisions, subdivisions, and caucuses), professional workshops, special projects, or reading professional literature. Employing agencies should provide resources to enable each professional's continuing development.

Overview of Standards

The following CEC International Standards for Entry into Special Education Practice were developed over a 6-year period through a process involving thousands of special educators. The Standards are based on a framework adopted by the CEC Delegate Assembly in 1989. They call for entry-level special educators seeking certification to practice to be able to demonstrate that they:

- Have completed at least a bachelor's degree.
- Possess the *CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers.*
- Possess the knowledge and skills contained in the *CEC Specialized Knowledge and Skills Essential for Beginning Special Education Teachers* in the areas of specialization in which the special educator is being certified to teach.
- Serve a mentorship of at least 1 year.

Further, the Standards stipulate that continued approval to practice be for a limited time, with periodic renewal, and that special educators participate in a minimum of 25 hours each year of continuing education related to their field of professional practice.

How were the Standards developed?

The policy adopted by the CEC Delegate Assembly charged CEC and its divisions with the further development of the Standards. Overall responsibility for this task was delegated to the CEC Professional Standards and Practice Standing Committee.

The Committee established a Subcommittee on Knowledge and Skills, cochaired by Barbara Sirvis, of New York, and Bill Swan, of Georgia, and composed of CEC division representatives and past CEC Teachers of the Year. It set out to accomplish the following two major tasks:

- Identify a common core of knowledge and skills for all beginning special education teachers.
- Create specialty sets of knowledge and skills that are necessary to teach in a particular area of exceptionality or age group.

The Subcommittee gathered materials from literature; state, provincial, and local governments; institutions of higher education; and elsewhere. The Subcommittee then identified and organized thousands of competencies into major categories, culled them down to 195 statements, and determined the importance of each by surveying a 1,000-person sample of CEC's membership. Based on the response (54%), the Subcommittee reduced the number of statements to 107.

CEC adopted these validated statements, which became *The CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers*, published in the fall 1992 issue of *TEACHING Exceptional Children*.

Alan Koenig, of Texas, assumed the chairmanship of the Subcommittee on Knowledge and Skills in 1993 and began developing specialty sets of knowledge and skills to supplement the Common Core. The exceptionality and age-specific CEC divisions took the lead, developing sets of knowledge and skills necessary to teach in their areas of specialization. The Subcommittee worked with the divisions to ensure that the specialty sets were formatted properly and that the statements supplemented the Common Core.

The Subcommittee also developed a survey, which was sent to a random sample of the division's membership. Each survey was composed of at least half teachers and other direct service providers. Modifications were made in consultation with the division. Generally, there was a high level of concurrence with the work the division produced.

The Early Childhood Special Education specialization area knowledge and skills statements are taken from a concept paper, jointly approved by CEC's Division for Early Childhood, the National Association for the Education of Young Children, and the Association of Teacher Educators, *Personnel Standards for Early Education and Early Intervention: Guidelines for Licensure in Early Childhood Special Education* (DEC, NAEYC, & ATE, 1995). The content stan-

dards portion of the paper, however, has been reformatted to maintain consistency with CEC's eight categories of knowledge and skills statements for this publication. In its approved format, the concept paper included standards categories of (a) child development and learning, (b) curriculum development and implementation, (c) family and community relationships, (d) assessment and evaluation, (e) field experiences, and (f) professionalism. These six categories were selected to promote consistency with the *NAEYC Guidelines for Preparation of Early Childhood Professionals* (NAEYC, 1991) and to facilitate states' using the option to develop combined certifications. The concept paper in this latter format is disseminated by DEC, NAEYC, and ATE. All of the performance standards, with the exception of the field experiences standards, were included and grouped under one of the eight CEC knowledge and skills category headings. The field experiences standards were incorporated into the CEC/NCATE Guidelines for CEC Program Approval of Undergraduate or Basic Programs. The reader should note that performance standards are based on the notion that the individual can demonstrate ability to perform in authentic situations. Although the emphasis is on performance, the implication is that individuals have the knowledge base to apply skills in specific situations. The performance standards, therefore, are grouped as skills. Because of this, knowledge statements are not included in the Early Childhood Special Education specialization section. It is important, however, to emphasize that the early childhood and early childhood special education knowledge bases support these skills statements.

In 1996, after initial publication, comments were received from the field regarding the knowledge and skills statements. After review of all of the comments, CEC approved in the spring of 1996 a number of technical and clarifying changes. These are included in this edition.

What are the needs in the profession that these Standards seek to address?

While there is great diversity within our profession, there are also significant commonalities. It was the view of the delegates to the CEC Convention of 1989 that it was essential that we, as a profession, define what our common knowledge and skills are as well as the knowledge and skills that define our areas of specialization. One reason for that view was that the certification standards of the states and provinces that govern eligibility to practice vary so widely that it is difficult for qualified special educators in one jurisdiction to become certified to practice if they move to a different state or province. Evidence suggests that this is a significant factor in the current shortage of qualified special education teachers. Over the years, a number of states and provinces have sought from CEC guidance on how they should design their certification standards. Future special educators have contacted us looking for college and university professional preparation programs that would prepare them to be certified anywhere. Given that such preparation programs tend to reflect the certification requirements of their state or province, little help could be provided. In most professions it is presumed that once you have been certified to practice in one jurisdiction you will be qualified to practice elsewhere with only some minor additional requirements. These Standards provide the common vehicle to resolve this problem.

A second reason for the delegate's view was that a profession has a knowledge base and practice skills. Collectively they define the profession and provide the common bond that links us together. This common bond of knowledge and skills allows each of us to know what we can expect from each other and also informs others of what they should be able to expect from us. Individual special educators are often expected to assume responsibilities that are beyond the knowledge and skills they possess. By having certification standards that are knowledge and skills based, special educators are in a better position to ensure that what they provide to children and their families is of the highest quality.

The Standards, other than those for early childhood, are by category of exceptionality. Is CEC promoting exceptionality-specific certification?

The CEC standards define what an individual must know and be able to do to teach a child with a particular exceptionality. If an individual is expected to teach students with varying exceptionalities, then that individual should have mastery of the knowledge and skills for each of the exceptionalities.

For example, if a state or province has a certification category "teacher of students with mild disabilities" and expects the special educator to work with students with learning disabilities and behavior disorders, then the teacher would have to show mastery of the knowledge and skills in both areas of specialization.

Do the Standards help a special education teacher who, after being certified in one or more areas, would like to add additional certifications?

Through the initial certification, the special education teacher demonstrated mastery of the common core knowledge and skills. Therefore all the teacher would have to do is to be able to demonstrate the knowledge and skills in the additional area of specialization in which he or she is seeking to be certified. The Standards do not address how the teacher must acquire the additional knowledge and skills, but they recognize that it may be done through a variety of means. This approach should simplify the process by which special educators are able to expand the areas in which they are qualified to teach without having to repeat instruction in what they already know and can do.

Do the Standards define what a special educator should know and be able to do to perform at a level of excellence in the profession?

No, the Standards define the minimum essential knowledge and skills necessary for entry into practice. The CEC members who developed these Standards recognized that there are many things that need to be learned through practice and continuing education. All special educators are expected to continually upgrade their knowledge and skills through planned, preapproved, organized, and recognized professional development activities. The Standards also state that "employing agencies should provide resources to enable each professional's continuing development."

Do the Standards define all of what an entry-level special educator should know and be able to do?

The Standards define the knowledge and skills pertaining to special education that the teacher should have. However, as the preamble to the Common Core notes "it is assumed that a special educator who is required to teach specific subjects or content areas . . . has additional preparation, practicum experiences, and expertise in those areas."

What is a mentorship?

When a special educator begins practice in a new area of certification, he or she should have the opportunity to work with a mentor who is an experienced professional in the same or a similar role. The purpose of the mentor is to provide expertise and support to the teacher on a continuing basis for at least the first year of practice in that area of certification. The mentorship is part of continuing education; thus, it is a requirement for maintaining certification, not a requirement for initial certification. The mentorship is a professional relationship between the new teacher and an experienced teacher that aids the new teacher in further developing knowledge and skills in the area of certification and provides the support required to sustain the new teacher in practice. The mentorship is collegial, not supervisory. It is essential that a mentor have knowledge, skills, and experience in the new teacher's area of specialization in order to provide the expertise and support the new teacher requires to practice effectively. Thus, it is essential that new teachers practice in environments where mentors are available. Members of the special education profession are expected to serve as mentors to new professionals as part of their professional responsibilities, and they should receive the resources and support necessary to carry out this responsibility effectively.

It should be noted that The Council for Exceptional Children is working on more fully developing the operational aspects of the mentorship program and is seeking guidance from the field. We recognize that the intensity of a mentorship will vary depending on the experience of the special educator.

Does an experienced special educator who obtains an additional area of certification have to have a mentorship?

The CEC Standards provide that special education teachers should receive mentorships when they begin practice in each new role or certifica-

tion. Thus, for example, an experienced teacher of students with visual impairments who, after the necessary preparation, becomes certified to teach students in early childhood should receive a mentorship during the first year of practice in early childhood in order to maintain the certification in early childhood.

Must an individual have a degree in special education to become certified as a special educator?

The Standards require that a person seeking certification must have "no less than a bachelor's degree which encompasses the knowledge and skills consistent with entry level into special education teaching." CEC recognizes that some individuals enter the profession through graduate school programs. Certainly that is consistent with these Standards.

Will these Standards change over time?

CEC recognizes that what we need to know to practice effectively changes with advances in research and practice and that any standards will need to be updated over time. Therefore, the CEC Professional Standards and Practice Committee has established a process for the continual monitoring and improvement of these Standards and consideration of amendments offered by members and CEC units.

Proposed changes should be submitted to the CEC Professional Standards and Practice Standing Committee at least 8 months prior to the annual CEC convention. Changes that are approved by the Committee for field consideration will be published for comment in a CEC publication. A stratified sample of CEC members will be surveyed as to their views on the proposed changes. The Committee will then take action on the proposal, and, if approved, it will be forwarded to the CEC Executive Director for final adoption. The Committee may make technical amendments at any time and will conduct a full-scale review of the standards at least every 5 years.

Does CEC plan to develop additional areas of specialization?

While the eight areas of specialization encompass the majority of practice of special educators, we realize that they do not encompass the totality of the profession. We expect to develop additional areas of specialization over the coming years.

CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers

Preamble

The standards of the profession of special education are a formally codified set of beliefs. These belief statements represent the special educator's principles of appropriate ethical behavior and are based on several assumptions.

One assumption is that special education has within its heritage the perspectives of advocacy for persons with exceptionalities and of embracing individual differences. These differences include the traditional consideration of the nature and effect of exceptionalities. As the community of exceptional children, youth, and adults has become increasingly diverse, these perspectives have been broadened to include other characteristics that significantly influence their quality of life. To maintain their ability to successfully function as advocates for their multicultural clients, special educators must broaden their perspectives to ensure vigilant attention to the issues of diversity. Current demographic trends clearly indicate that:

- The numbers of children and youth from culturally and linguistically diverse backgrounds served in public schools are growing rapidly.
- Cultural and linguistic diversity is expected to continue as well as to increase.
- The number of professionals who are culturally and linguistically diverse entering the special education profession has been declining even as the numbers of students who are culturally and linguistically diverse are rising.

Given the pervasive nature of diversity, professional standards are needed that guide professional practice in ways that are relevant to the multicultural populations served in special education. Specifically, these standards reflect the premise that, to design effective interventions, special educators must understand the characteristics of their learners, including factors such as culture, language, gender, religion, and sexuality. This premise has been addressed in two ways. First, most statements are inclusive in nature; that is, they identify knowledge and skills essential to effectively serve *all* exceptional learners, including those from culturally and linguistically diverse backgrounds. Second, selected items address the most critical aspects of diversity and are infused throughout the model.

Another assumption is that the sustained involvement of families and the larger community is fundamental to delivering high-quality educational services to individuals with exceptional learning needs. The knowledge and skills contained in this document should be interpreted broadly to include learners of all ages, beginning with infants and preschoolers and extending to young adults who are exiting the school program. Similarly, the term *families* should be interpreted broadly to include, as appropriate to given situations, biological mothers and fathers, adoptive parents, legal guardians, foster parents or primary caregivers, siblings, and extended family members. Finally, while not specifically stated, it is assumed that special educators may provide learning opportunities in a variety of learning environments, including the home, preschool, school, and community settings, as well as in both specialized and integrated environments.

This document focuses on the unique set of knowledge and skills needed to practice in special education, not on specific areas of exceptionality or age groupings, general educational methods, or subject matter content. Special educators who practice in a specific area (or areas) of exceptionality or age grouping must possess the exceptionality-specific knowledge and skills adopted by CEC *in addition to* the Common Core. Also, it is assumed that a special educator who is required to teach specific subjects or content areas (such as science, social studies, foreign languages, vocational education) has additional preparation, practicum experiences, and expertise in those areas.

An additional assumption is that this Common Core of Knowledge and Skills will change over time. As with the adoption of the CEC Code of Ethics, time should be provided for

continuing examination, debate, and further articulation of the knowledge and skills for entry-level special educators.

A final assumption of this Common Core of Knowledge and Skills is that the professional conduct of entry-level special educators is governed foremost by the CEC Code of Ethics. Special education professionals

- Are committed to developing the highest educational and quality of life potential of exceptional individuals.
- Promote and maintain a high level of competence and integrity in practicing their profession.
- Engage in professional activities that benefit exceptional individuals, their families, other colleagues, students or research subjects.
- Exercise objective professional judgment in the practice of their profession.
- Strive to advance their knowledge and skills regarding the education of exceptional individuals.
- Work within the standards and policies of their profession.
- Seek to uphold and improve, where necessary, the laws, regulations, and policies governing the delivery of special education and related services and the practice of their profession.
- Do not condone or participate in unethical or illegal acts, nor violate professional standards adopted by the Delegate Assembly of CEC.

It was through significant professional and personal commitment that the members of CEC crafted this product. In the process we learned not only about knowledge and skills but also about each other and developed a deep mutual respect. May those who use this Common Core of Knowledge and Skills experience that same mutual respect from all who serve children and their families.

KNOWLEDGE AND SKILLS STATEMENTS

CC: Common Core
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge:

K1 Models, theories, and philosophies that provide the basis for special education practice.

K2 Variations in beliefs, traditions, and values across cultures within society and the effect of the relationship among child, family, and schooling.

K3 Issues in definition and identification procedures for individuals with exceptional learning needs including individuals from culturally and/or linguistically diverse backgrounds.

K4 Assurances and due process rights related to assessment, eligibility, and placement.

K5 Rights and responsibilities of parents, students, teachers and other professionals, and schools as they relate to individual learning needs.

Skills:

S1 Articulate personal philosophy of special education including its relationship to/with regular education.

S2 Conduct instructional and other professional activities consistent with the requirements of law, rules and regulations, and local district policies and procedures.

CC: Common Core
2. Characteristics of Learners

Knowledge:

K1 Similarities and differences among the cognitive, physical, cultural, social, and emotional needs of individuals with and without exceptional learning needs.

K2 Differential characteristics of individuals with exceptionalities, including levels of severity and multiple exceptionalities.

K3 Characteristics of normal, delayed, and disordered communication patterns of individuals with exceptional learning needs.

K4 Effects an exceptional condition(s) may have on an individual's life.

K5 Characteristics and effects of the cultural and environmental milieu of the child and the family including cultural and linguistic diversity, socioeconomic level, abuse/neglect, and substance abuse.

K6 Effects of various medications on the educational, cognitive, physical, social, and emotional behavior of individuals with exceptionalities.

K7 Educational implications of characteristics of various exceptionalities.

Skills:

S1 Access information on various cognitive, communication, physical, cultural, social, and emotional conditions of individuals with exceptional learning needs.

CC: Common Core
3. Assessment, Diagnosis, and Evaluation

Knowledge:

K1 Basic terminology used in assessment.

K2 Ethical concerns related to assessment.

K3 Legal provisions, regulations, and guidelines regarding assessment of individuals.

K4 Typical procedures used for screening, prereferral, referral, and classification.

K5 Appropriate application and interpretation of scores, including grade score versus standard score, percentile ranks, age/grade equivalents, and stanines.

Skills:

S1 Collaborate with families and other professionals involved in the assessment of individuals with exceptional learning needs.

S2 Create and maintain records.

S3 Gather background information regarding academic, medical, and family history.

S4 Use various types of assessment procedures appropriately.

S5 Interpret information from formal and informal assessment instruments and procedures.

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Knowledge:

K6 Appropriate use and limitations of each type of assessment instrument.

K7 Incorporation of strategies that consider the influence of diversity on assessment, eligibility, programming, and placement of individuals with exceptional learning needs.

K8 The relationship between assessment and placement decisions.

K9 Methods for monitoring progress of individuals with exceptional learning needs.

Skills:

S6 Report assessment results to individuals with exceptional learning needs, parents, administrators, and other professionals using appropriate communication skills.

S7 Use performance data and information from teachers, other professionals, individuals with exceptionalities, and parents to make or suggest appropriate modification in learning environments.

S8 Develop individualized assessment strategies for instruction.

S9 Use assessment information in making instructional decisions and planning individual programs that result in appropriate placement and intervention for all individuals with exceptional learning needs, including those from culturally and/or linguistically diverse backgrounds.

S10 Evaluate the results of instruction.

S11 Evaluate supports needed for integration into various program placements.

CC: Common Core
4. Instructional Content and Practice

Knowledge:

K1 Differing learning styles of individuals with exceptional learning needs and how to adapt teaching to these styles.

K2 Demands of various learning environments such as individualized instruction in general education classes.

K3 Curricula for the development of motor, cognitive, academic, social, language, affective, career, and functional life skills for individuals with exceptional learning needs.

K4 Instructional and remedial methods, techniques, and curriculum materials.

K5 Techniques for modifying instructional methods and materials.

K6 Life skills instruction relevant to independent, community, and personal living and employment.

Skills:

S1 Interpret and use assessment data for instruction.

S2 Develop and/or select instructional content, materials, resources, and strategies that respond to cultural, linguistic, and gender differences.

S3 Develop comprehensive, longitudinal individualized programs.

S4 Choose and use appropriate technologies to accomplish instructional objectives and to integrate them appropriately into the instructional process.

S5 Prepare appropriate lesson plans.

S6 Involve the individual and family in setting instructional goals and charting progress.

S7 Use task analysis.

Knowledge:

K7 Cultural perspectives influencing the relationship among families, schools, and communities as related to effective instruction for individuals with exceptional learning needs.

Skills:

S8 Select, adapt, and use instructional strategies and materials according to characteristics of the learner.

S9 Sequence, implement, and evaluate individual learning objectives.

S10 Integrate affective, social, and career/vocational skills with academic curricula.

S11 Use strategies for facilitating maintenance and generalization of skills across learning environments.

S12 Use instructional time properly.

S13 Teach individuals with exceptional learning needs to use thinking, problem-solving, and other cognitive strategies to meet their individual needs.

S14 Choose and implement instructional techniques and strategies that promote successful transitions for individuals with exceptional learning needs.

S15 Establish and maintain rapport with learners.

S16 Use verbal and nonverbal communication techniques.

S17 Conduct self-evaluation of instruction.

CC: Common Core
5. Planning and Managing the Teaching and Learning Environment

Knowledge:

K1 Basic classroom management theories, methods, and techniques for individuals with exceptional learning needs.

K2 Research-based best practices for effective management of teaching and learning.

K3 Ways in which technology can assist with planning and managing the teaching and learning environment.

Skills:

S1 Create a safe, positive, and supportive learning environment in which diversities are valued.

S2 Use strategies and techniques for facilitating the functional integration of individuals with exceptional learning needs in various settings.

S3 Prepare and organize materials to implement daily lesson plans.

S4 Incorporate evaluation, planning, and management procedures that match learner needs with the instructional environment.

Knowledge:

Skills:

S5 Design a learning environment that encourages active participation by learners in a variety of individual and group learning activities.

S6 Design, structure, and manage daily routines, effectively including transition time, for students, other staff, and the instructional setting.

S7 Direct the activities of a classroom paraprofessional, aide, volunteer, or peer tutor.

S8 Create an environment that encourages self-advocacy and increased independence.

CC: Common Core
6. Managing Student Behavior and Social Interaction Skills

Knowledge:

K1 Applicable laws, rules and regulations, and procedural safeguards regarding the planning and implementation of management of behaviors of individuals with exceptional learning needs.

K2 Ethical considerations inherent in behavior management.

K3 Teacher attitudes and behaviors that positively or negatively influence behavior of individuals with exceptional learning needs.

K4 Social skills needed for educational and functional living environments and effective instruction in the development of social skills.

K5 Strategies for crisis prevention/intervention.

K6 Strategies for preparing individuals to live harmoniously and productively in a multiclass, multiethnic, multicultural, and multinational world.

Skills:

S1 Demonstrate a variety of effective behavior management techniques appropriate to the needs of individuals with exceptional learning needs.

S2 Implement the least intensive intervention consistent with the needs of the individuals with exceptionalities.

S3 Modify the learning environment (schedule and physical arrangement) to manage inappropriate behaviors.

S4 Identify realistic expectations for personal and social behavior in various settings.

S5 Integrate social skills into the curriculum.

S6 Use effective teaching procedures in social skills instruction.

S7 Demonstrate procedures to increase the individual's self-awareness, self-control, self-reliance, and self-esteem.

S8 Prepare individuals with exceptional learning needs to exhibit self-enhancing behavior in response to societal attitudes and actions.

CC: Common Core
7. Communication and Collaborative Partnerships

Knowledge:

K1 Factors that promote effective communication and collaboration with individuals, parents, and school and community personnel in a culturally responsive program.

K2 Typical concerns of parents of individuals with exceptional learning needs and appropriate strategies to help parents deal with these concerns.

K3 Development of individual student programs working in collaboration with team members.

K4 Roles of individuals with exceptionalities, parents, teachers, and other school and community personnel in planning an individualized program.

K5 Ethical practices for confidential communication to others about individuals with exceptional learning needs.

Skills:

S1 Use collaborative strategies in working with individuals with exceptional learning needs, parents, and school and community personnel in various learning environments.

S2 Communicate and consult with individuals, parents, teachers, and other school and community personnel.

S3 Foster respectful and beneficial relationships between families and professionals.

S4 Encourage and assist families to become active participants in the educational team.

S5 Plan and conduct collaborative conferences with families or primary caregivers.

S6 Collaborate with regular classroom teachers and other school and community personnel in integrating individuals with exceptional learning needs into various learning environments.

S7 Communicate with regular teachers, administrators, and other school personnel about characteristics and needs of individuals with specific exceptional learning needs.

CC: Common Core
8. Professionalism and Ethical Practices

Knowledge:

K1 Personal cultural biases and differences that affect one's teaching.

K2 Importance of the teacher serving as a model for individuals with exceptional learning needs.

Skills:

S1 Demonstrate commitment to developing the highest educational and quality-of-life potential of individuals with exceptional learning needs.

S2 Demonstrate positive regard for the culture, religion, gender, and sexual orientation of individual students.

S3 Promote and maintain a high level of competence and integrity in the practice of the profession.

S4 Exercise objective professional judgment in the practice of the profession.

S5 Demonstrate proficiency in oral and written communication.

Knowledge:

Skills:

S6 Engage in professional activities that may benefit individuals with exceptional learning needs, their families, and/or colleagues.

S7 Comply with local, state, provincial, and federal monitoring and evaluation requirements.

S8 Use copyrighted educational materials in an ethical manner.

S9 Practice within the CEC Code of Ethics and other standards and policies of the profession.

CEC Knowledge and Skills for All Beginning Special Education Teachers of Students Who Are Deaf or Hard of Hearing

KNOWLEDGE AND SKILLS STATEMENTS

DH: Deaf or Hard of Hearing
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge:

K1 Current educational definitions of students with hearing loss, including identification criteria, labeling issues, and current incidence and prevalence figures.

K2 Models, theories, and philosophies (e.g., bilingual-bicultural, total communication, oral/aural) that provide the basis for educational practice(s) for students who are deaf or hard of hearing, as consistent with program philosophy.

K3 Variations in beliefs, traditions, and values across cultures and within society, and the effect of the relationships among children who are deaf or hard of hearing, their families, and schooling.

K4 Issues in definition and identification procedures for individuals who are deaf or hard of hearing (e.g., cultural versus medical perspective).

K5 Rights and responsibilities (e.g., Deaf Children's Bill of Rights) of parents, students, teachers, and schools as they relate to students who are deaf or hard of hearing.

K6 The impact of various educational placement options (from the perspective of the needs of any given child who is deaf or hard of hearing and consistent with program philosophy) with regard to cultural identity and linguistic, academic, and social-emotional development.

Skills:

S1 Apply understanding of theory, philosophy, and models of practice to the education of students who are deaf or hard of hearing.

S2 Articulate pros and cons of current issues and trends in special education and the field of education of children who are deaf or hard of hearing.

S3 Identify the major contributors to the growth and improvement of knowledge and practice in the field of education of children who are deaf or hard of hearing.

DH: Deaf or Hard of Hearing
2. Characteristics of Learners

Knowledge:

K1 Communication features (visual, spatial, tactile, and/or auditory) salient to the learner who is deaf or hard of hearing that are necessary to enhance cognitive, emotional, and social development.

K2 Research in cognition related to children who are deaf or hard of hearing.

K3 Cultural dimensions that being deaf or hard of hearing may add to the life of a child.

K4 Various etiologies of hearing loss that can result in additional sensory, motor, and/or learning differences in students who are deaf or hard of hearing.

K5 Effects of families and/or primary caregivers on the overall development of the child who is deaf or hard of hearing.

K6 Effects that onset of hearing loss, age of identification, and provision of services have on the development of the child who is deaf or hard of hearing.

K7 Impact of early comprehensible communication on the development of the child who is deaf or hard of hearing.

K8 Recognition that being deaf or hard of hearing alone does not necessarily preclude normal academic development, cognitive development, or communication ability.

K9 The differences in quality and quantity of incidental language/learning experiences that children who are deaf or hard of hearing may experience.

K10 Effects of sensory input on the development of language and cognition of children who are deaf or hard of hearing.

Skills:

(None in addition to Common Core.)

DH: Deaf or Hard of Hearing
3. Assessment, Diagnosis, and Evaluation

Knowledge:

K1 Specialized terminology used in the assessment of children who are deaf or hard of hearing.

K2 Components of an adequate evaluation for eligibility placement and program planning (e.g., interpreters, special tests) decisions for students who are deaf or hard of hearing.

K3 Legal provisions, regulations and guidelines regarding unbiased diagnostic assessment, and use of instructional assessment measures with students who are deaf or hard of hearing

K4 Special policies regarding referral and placement procedures (e.g., *Federal Policy Guidance*, October 30, 1993) for students who are deaf or hard of hearing.

Skills:

S1 Administer appropriate assessment tools utilizing the natural/native/preferred language of the student who is deaf or hard of hearing.

S2 Gather and analyze communication samples from students who are deaf or hard of hearing, including nonverbal as well as linguistic acts.

S3 Use exceptionality-specific assessment instruments (e.g., SAT-HI, TERA-DHH, FSST) appropriate for students who are deaf or hard of hearing.

DH: Deaf or Hard of Hearing
4. Instructional Content and Practice

Knowledge:

K1 Sources of specialized materials for students who are deaf or hard of hearing.

K2 Components of the nonlinguistic and linguistic communication that students who are deaf or hard of hearing use.

K3 The procedures and technologies required to educate students who are deaf or hard of hearing under one or more of the existing modes or philosophies (consistent with program philosophy).

K4 Information related to American Sign Language (ASL) and existing communication modes used by students who are deaf or hard of hearing.

K5 Current theories of how languages (e.g., ASL and English) develop in both children who are hearing and those who are deaf or hard of hearing.

Skills:

S1 Demonstrate proficiency in the language(s) the beginning teacher will use to instruct students who are deaf or hard of hearing.

S2 Demonstrate the basic characteristics of various existing communication modes used with students who are deaf or hard of hearing.

S3 Select, design, produce, and utilize media, materials, and resources required to educate students who are deaf or hard of hearing under one or more of the existing modes or philosophies (e.g., bilingual-bicultural, total communication, aural/oral).

S4 Infuse speech skills into academic areas as consistent with the mode or philosophy espoused and the ability of the student who is deaf or hard of hearing.

Knowledge:

K6 Subject matter and practices used in general education across content areas.

K7 Ways to facilitate cognitive and communicative development in students who are deaf or hard of hearing (e.g., visual saliency) consistent with program philosophy.

K8 Techniques of stimulation and utilization of residual hearing in students who are deaf or hard of hearing consistent with program philosophy.

K9 Research-supported instructional strategies and practice for teaching students who are deaf or hard of hearing.

Skills:

S5 Modify the instructional process and classroom environment to meet the physical, cognitive, cultural, and communication needs of the child who is deaf or hard of hearing (e.g., teacher's style, acoustic environment, availability of support services, availability of appropriate technologies).

S6 Facilitate independent communication behavior in children who are deaf or hard of hearing.

S7 Apply first and second language teaching strategies (e.g., English through ASL or ESL) appropriate to the needs of the individual student who is deaf or hard of hearing and consistent with program philosophy.

S8 Demonstrate the ability to modify incidental language experiences to fit the visual and other sensory needs of children who are deaf or hard of hearing.

S9 Provide appropriate activities for students who are deaf or hard of hearing to promote literacy in English and/or ASL.

DH: Deaf or Hard of Hearing
5. Planning and Managing the Teaching and Learning Environment

Knowledge:

K1 Deaf cultural factors that may influence classroom management of students who are deaf or hard of hearing.

K2 Model programs, including career/vocational and transition, that have been effective for students with hearing losses.

Skills:

S1 Manage assistive/augmentative devices appropriate for students who are deaf or hard of hearing in learning environments.

S2 Select, adapt, and implement classroom management strategies for students who are deaf or hard of hearing that reflect understanding of each child's cultural needs, including primarily visual Deaf culture where appropriate.

S3 Design a classroom environment that maximizes opportunities for visually oriented and/or auditory learning in students who are deaf or hard of hearing.

S4 Plan and implement instruction for students who are deaf or hard of hearing and who have multiple disabilities and special needs.

DH: Deaf or Hard of Hearing
6. Managing Student Behavior and Social Interaction Skills

Knowledge:

K1 Processes for establishing ongoing interactions of students who are deaf or hard of hearing with peers and role models who are deaf or hard of hearing.

K2 Opportunities for interaction with communities of individuals who are deaf or hard of hearing on the local, state, and national levels.

Skills:

S1 Prepare students who are deaf or hard of hearing in the appropriate use of interpreters.

DH: Deaf or Hard of Hearing
7. Communication and Collaborative Partnerships

Knowledge:

K1 Available resources to help parents of children who are deaf or hard of hearing deal with their concerns regarding educational options and communication modes/philosophies for their children.

K2 Roles and responsibilities of teachers and support personnel in educational practice for students who are deaf or hard of hearing (e.g., educational interpreters, tutors, and notetakers).

K3 Effects of communication on the development of family relationships and strategies used to facilitate communication in families with children who are deaf or hard of hearing.

K4 Services provided by governmental and nongovernmental agencies or individuals in the ongoing management of children who are deaf or hard of hearing.

Skills:

S1 Teach students who are deaf or hard of hearing to use support personnel effectively (e.g., educational interpreters, tutors, and notetakers).

S2 Facilitate communication between the child who is deaf or hard of hearing and his or her family and/or other caregivers.

S3 Facilitate coordination of support personnel (e.g., interpreters) to meet the diverse communication needs of the student who is deaf or hard of hearing and his or her primary caregivers.

DH; Deaf or Hard of Hearing
8. Professionalism and Ethical Practices

Knowledge:

K1 The process for acquiring the needed skills in modes/philosophies of education of students who are deaf or hard of hearing in which an individual was not prepared.

K2 Consumer and professional organizations, publications, and journals relevant to the field of education of students who are deaf or hard of hearing.

Skills:

S1 Actively seek interaction with adults in the Deaf community to maintain/improve ASL, English signs, or cues as consistent with program philosophy.

S2 Demonstrate the ability to interact with a variety of individuals who are deaf or hard of hearing on an adult-to-adult level.

S3 Provide families with the knowledge and skills to make appropriate choices needed to enhance the development and transition of their children who are deaf or hard of hearing.

S4 Participate in the activities of professional organizations relevant to the education of students who are deaf or hard of hearing.

CEC Knowledge and Skills for All Beginning Special Education Teachers of Students in Early Childhood

KNOWLEDGE AND SKILLS STATEMENTS

EC: Early Childhood
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge: *

Skills:

S1 Articulate the historical, philosophical, and legal basis of services for young children both with and without special needs.

S2 Identify ethical and policy issues related to educational, social, and medical services for young children and their families.

S3 Identify current trends and issues in early childhood education, early childhood special education and special education.

S4 Identify legislation that affects children, families, and programs for children.

EC: Early Childhood
2. Characteristics of Learners

Knowledge: *

Skills:

S1 Apply theories of child development, both typical and atypical, and apply current research with emphasis on cognitive, motor, social-emotional, communication, adaptive, and aesthetic development in learning situations in family and community contexts.

S2 Identify pre-, peri-, and postnatal development and factors such as biological and environmental conditions that affect children's development and learning.

* Indicators of the ECSE knowledge base beyond the common core are reflected in the ECSE skills statements. Refer to the conceptual base that appears in *Personnel Standards for Early Education and Early Intervention: Guidelines for Licensure in Early Childhood Special Education* (DEC, NAEYC, & ATE, 1995).

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Knowledge:

Skills:

S3 Identify specific disabilities, including the etiology, characteristics, and classification of common disabilities in young children, and describe specific implications for development and learning in the first years of life.

S4 Apply knowledge of cultural and linguistic diversity and the significance of sociocultural and political contexts for development and learning, and recognize that children are best understood in the contexts of family, culture, and society.

S5 Demonstrate understanding of (a) developmental consequences of stress and trauma, (b) protective factors and resilience, (c) the development of mental health, and (d) the importance of supportive relationships.

EC: Early Childhood
3. Assessment, Diagnosis, and Evaluation

Knowledge: *

Skills:

S1 Assess children's cognitive, social-emotional, communication, motor, adaptive, and aesthetic development.

S2 Select and use a variety of informal and formal assessment instruments and procedures, including observational methods, to make decisions about children's learning and development.

S3 Select and administer assessment instruments and procedures based on the purpose of the assessment being conducted and in compliance with established criteria and standards.

S4 Develop and use authentic, performance-based assessments of children's learning to assist in planning, communicate with children and parents, and engage children in self-assessment.

S5 Involve families as active participants in the assessment process.

* Indicators of the ECSE knowledge base beyond the common core are reflected in the ECSE skills statements. Refer to the conceptual base that appears in *Personnel Standards for Early Education and Early Intervention: Guidelines for Licensure in Early Childhood Special Education* (DEC, NAEYC, & ATE, 1995).

Knowledge:

Skills:

S6 Participate and collaborate as a team member with other professionals in conducting family-centered assessments.

S7 Communicate assessment results and integrate assessment results from others as an active team participant in the development and implementation of the individualized education program (IEP) and individual family service plan (IFSP).S8 Monitor, summarize, and evaluate the acquisition of child and family outcomes as outlined on the IFSP or IEP.

S9 Select, adapt, and administer assessment instruments and procedures for specific sensory and motor disabilities.

S10 Communicate options for programs and services at the next level and assist the family in planning for transition.

S11 Implement culturally unbiased assessment instruments and procedures.

S12 Develop and use formative and summative program evaluation to ensure comprehensive quality of the total environment for children, families, and the community.

EC: Early Childhood
4. Instructional Content and Practice

Knowledge: *

Skills:

S1 Plan and implement developmentally and individually appropriate curricula and instructional practices based on knowledge of individual children, the family, the community, and curricula goals and content.

S2 Develop an IFSP or IEP, incorporating both child and family outcomes in partnership with family members and other professionals.

S3 Incorporate information and strategies from multiple disciplines in the design of intervention strategies.

* Indicators of the ECSE knowledge base beyond the common core are reflected in the ECSE skills statements. Refer to the conceptual base that appears in *Personnel Standards for Early Education and Early Intervention: Guidelines for Licensure in Early Childhood Special Education* (DEC, NAEYC, & ATE, 1995).

Knowledge:

Skills:

S4 Develop and select learning experiences and strategies that affirm and respect family, cultural, and societal diversity, including language differences.

S5 Plan for and link current developmental and learning experiences and teaching strategies with those of the next educational setting.

S6 Select intervention curricula and methods for children with specific disabilities including motor, sensory, health, communication, social-emotional, and cognitive disabilities.

S7 Implement developmentally and functionally appropriate individual and group activities using a variety of formats, including play, environmental routines, parent-mediated activities, small-group projects, cooperative learning, inquiry experiences, and systematic instruction.

S8 Develop and implement an integrated curriculum that focuses on children's needs and interests and takes into account culturally valued content and children's home experiences.

S9 Demonstrate appropriate use of technology, including adaptive and assistive technology.

S10 Employ pedagogically sound and legally defensible instructional practices.

S11 Implement nutrition and feeding strategies for children with special needs.

S12 Use appropriate health appraisal procedures and recommend referral and ongoing follow-up to appropriate community health and social services.

S13 Identify aspects of medical care for premature, low birth weight, and other medically fragile babies, including methods of care for young children dependent on technology and implications of medical conditions on child develop and family resources, concerns, and priorities.

S14 Recognize signs of emotional distress, child abuse, and neglect in young children and follow procedures for reporting known or suspected abuse or neglect to appropriate authorities.

EC: Early Childhood
5. Planning and Managing the Teaching and Learning Environment

Knowledge: *

Skills:

S1 Make specific adaptations for the special needs of children who have unique talents, learning and developmental needs, or specific disabilities.

S2 Design plans that incorporate the use of technology, including adaptive and assistive technology.

S3 Select, develop, and evaluate developmentally and functionally appropriate materials, equipment, and environments.

S4 Establish and maintain physically and psychologically safe and healthy learning environments that promote development and learning.

S5 Provide a stimulus-rich indoor and outdoor environment that employs materials, media, and technology, including adaptive and assistive technology.

S6 Organize space, time, peers, materials, and adults to maximize child progress in group and home settings.

S7 Implement basic health, nutrition, and safety management practices for young children, including specific procedures for infants and toddlers and procedures regarding childhood illness and communicable diseases.

* Indicators of the ECSE knowledge base beyond the common core are reflected in the ECSE skills statements. Refer to the conceptual base that appears in *Personnel Standards for Early Education and Early Intervention: Guidelines for Licensure in Early Childhood Special Education* (DEC, NAEYC, & ATE, 1995).

EC: Early Childhood
6. Managing Student Behavior and Social Interaction Skills

Knowledge: *

Skills:

S1 Use individual and group guidance and problem-solving techniques to develop positive and supportive relationships with children; to encourage and teach positive social skills and interaction among children; to promote positive strategies of conflict resolution; and to develop personal self-control, self-motivation, and self-esteem.

S2 Select and implement methods of behavior support and management appropriate for young children with special needs, including a range of strategies from less directive, less structured methods (e.g., verbal support and modeling) to more directive, more structured methods (e.g., applied behavior analysis).

S3 Support and facilitate family and child interactions as primary contexts for learning and development.

EC: Early Childhood
7. Communication and Collaborative Partnerships

Knowledge: *

Skills:

S1 Establish and maintain positive, collaborative relationships with families.

S2 Apply family systems theory and knowledge of the dynamics, roles, and relationships within families and communities.

S3 Demonstrate sensitivity to differences in family structures and social and cultural backgrounds.

S4 Assist families in identifying their resources, priorities, and concerns in relation to their child's development.

* Indicators of the ECSE knowledge base beyond the common core are reflected in the ECSE skills statements. Refer to the conceptual base that appears in *Personnel Standards for Early Education and Early Intervention: Guidelines for Licensure in Early Childhood Special Education* (DEC, NAEYC, & ATE, 1995).

Knowledge:

Skills:

S5 Respect parents' choices and goals for children and communicate effectively with parents about curriculum and children's progress.

S6 Involve families in assessing and planning for their children, including children with special needs.

S7 Implement a range of family-oriented services based on the family's identified resources, priorities, and concerns.

S8 Implement family services consistent with due process safeguards.

S9 Evaluate services with families.

S10 Collaborate/consult with other professionals and with agencies in the larger community to support children's development, learning, and well-being.

S11 Apply models of team process in diverse service delivery settings.

S12 Employ various team membership roles.

S13 Identify functions of teams as determined by mandates and service delivery needs of children and families.

S14 Identify structures supporting interagency collaboration, including interagency agreements, referral, and consultation.

S15 Participate as a team member to identify dynamics of team roles, interaction, communication, team building, problem solving, and conflict resolution.

S16 Employ two-way communication skills.

S17 Evaluate and design processes and strategies that support transitions among hospital; home; and infant/toddler, preprimary, and primary programs.

S18 Administer, supervise, and consult with or instruct other adults.

S19 Employ adult learning principles in supervising and training other adults.

S20 Facilitate the identification of staff development needs and strategies for professional growth.

S21 Apply various models of consultation in diverse settings.

Knowledge:

Skills:

S22 Provide consultation and training in content areas specific to services for children and families and organization/development programs.

S23 Provide feedback and evaluate performance in collaboration with other adults.

EC: Early Childhood
8. Professionalism and Ethical Practices

Knowledge: *

Skills:

S1 Adhere to the profession's code of ethical conduct.

S2 Serve as advocates on behalf of young children and their families, improved quality of programs and services for young children, and enhanced professional status and working conditions for early childhood special educators.

S3 Reflect upon one's own professional practice and develop, implement, and evaluate a professional development plan.

S4 Participate actively in professional organizations.

S5 Read and critically apply research and recommended practices.

* Indicators of the ECSE knowledge base beyond the common core are reflected in the ECSE skills statements. Refer to the conceptual base that appears in *Personnel Standards for Early Education and Early Intervention: Guidelines for Licensure in Early Childhood Special Education* (DEC, NAEYC, & ATE, 1995).

CEC Knowledge and Skills for All Beginning Special Education Teachers of Students with Emotional and Behavioral Disorders

KNOWLEDGE AND SKILLS STATEMENTS

BD: Emotional/Behavioral Disorders
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge:

K1 Current educational terminology and definitions of students with emotional/behavioral disorders (E/BD), including the identification criteria and labeling controversies, utilizing professional accepted classification systems, and current incidence and prevalence figures.

K2 Differing perceptions of deviance, including those from mental health, religion, legal-corrections, education, and social welfare.

K3 Differences between etiology and diagnosis unique to a variety of theoretical approaches (biophysical, psychodynamic, behavioral, ecological) and their application for students with E/BD.

K4 The historical foundations and classic studies, including the major contributors, that undergird the growth and improvement of knowledge and practices in the field of E/BD.

K5 The legal system to assist students with E/BD.

Skills:

S1 Analyze and articulate current issues and trends in special education and the field of E/BD.

S2 Articulate the factors that influence the overrepresentation of culturally/linguistically diverse students in programs for individuals with E/BD.

S3 Delineate the principles of normalization versus the educational concept of "least restrictive environment" in designing educational programs for students with E/BD.

BD: Emotional/Behavioral Disorders
2. Characteristics of Learners

Knowledge:

K1 Physical development, physical disability, and health impairments as they relate to the development and behavior of students with E/BD.

K2 Major social characteristics of individuals with E/BD.

K3 The effects of dysfunctional behavior on learning, and the differences between behavioral and emotional disorders and other disabling conditions.

Skills:

(None in addition to Common Core.)

BD: Emotional/Behavioral Disorders
3. Assessment, Diagnosis, and Evaluation

Knowledge:

K1 Essential characteristics of valid behavior ratings scales.

K2 Processes involved in the diagnosis of students with E/BD, including academic and social behaviors in accordance with the current *Diagnostic and Statistical Manual of Mental Disorders* (DSM).

K3 Specialized terminology used in the assessment of E/BD.

K4 Legal provisions, regulations, and guidelines regarding unbiased assessment and use of psychometric instruments and instructional assessment measures with students with E/BD.

K5 Specialized policies regarding screening, referral, and placement procedures for students with E/BD.

Skills:

S1 Prepare accurate formal social assessment reports on students with E/BD based on behavioral-ecological information.

S2 Implement procedures for assessing both appropriate and problematic social behaviors of students with E/BD.

S3 Use exceptionality-specific assessment instruments appropriately for assessing students with E/BD.

BD: Emotional/Behavioral Disorders
4. Instructional Content and Practice

Knowledge:

K1 Appropriate ways to apply research about students with E/BD in the classroom.

K2 Sources of specialized materials for students with E/BD.

K3 Research-supported instructional strategies and practices for teaching students with E/BD.

Skills:

S1 Identify and use prevention and intervention strategies as early as appropriate for use with students with E/BD.

S2 Delineate and apply the goals and intervention strategies and procedures related to a variety of theoretical approaches (including psychodynamic, behavioral, biophysical, and ecological) to students with E/BD.

S3 Use technology applicable to students with E/BD.

S4 Plan, organize, and implement individualized student programs appropriate to the cognitive and affective needs of the student with E/BD with special consideration to use of reinforcement systems and environmental conditions.

Knowledge:

Skills:

S5 Select, develop, adopt, and evaluate curriculum materials and technology applicable to students with E/BD.

S6 Establish a consistent classroom routine for students with E/BD.

S7 Delineate and apply appropriate management procedures when presented with spontaneous management problems applicable to students with E/BD.

S8 Establish classroom rules, as well as a means for enforcing these rules, that are applicable to students with E/BD.

S9 Integrate academic instruction, affective education, and behavior management for individual students and groups of students with E/BD.

S10 Evaluate strengths and limitations of the alternative instructional strategies designed for students with E/BD.

S11 Use student-initiated learning experiences and integrate them into ongoing instruction for students with E/BD.

BD: Emotional/Behavioral Disorders
5. Planning and Managing the Teaching and Learning Environment

Knowledge:

K1 Model programs, including career/vocational and transition, that have been effective for students with E/BD.

K2 Issues, resources, and techniques used to integrate students with E/BD into and out of alternative environments, including special centers, psychiatric hospitals, and residential treatment centers.

Skills:

S1 Monitor intragroup behavior changes from subject to subject and activity to activity applicable to students with E/BD.

S2 Select a functional classroom design (e.g., functional seating, work area, storage) that is effective for students with E/BD.

BD: Emotional/Behavioral Disorders
6. Managing Student Behavior and Social Interaction Skills

Knowledge:

K1 Rationale for selecting specific management techniques for individuals with E/BD.

K2 Continuum of alternative placements and programs available to students with E/BD; state, provincial, and local services available; and the advantages and disadvantages of placement options and programs within the continuum of services.

K3 The theory behind reinforcement techniques and its application to teaching students with E/BD.

Skills:

S1 Use a variety of nonaversive techniques (including voice modulation, facial expressions, planned ignoring, proximity control, and tension release) for the purpose of controlling targeted behavior and maintaining attention of students with E/BD.

S2 Develop and implement a systematic behavior management plan for students with E/BD using a variety of behavioral principles (including observation, recording, charting establishment of timelines, intervention technique hierarchies, and schedules of reinforcement).

S3 Select target behaviors to be changed and identify the critical variables affecting the target behavior (such as subsequent events and antecedent events).

S4 Designate certain pupil behaviors as either appropriate or inappropriate for a specific age group based on observation and social validation.

S5 Define and use skills in problem solving and conflict resolution.

BD: Emotional/Behavioral Disorders
7. Communication and Collaborative Partnerships

Knowledge:

K1 Sources of unique services, networks, and organizations for students with E/BD.

K2 Parent education programs and behavior management guides, including those commercially available, that address the management of severe behavioral problems and facilitate communication links applicable to students with E/BD.

K3 Collaborative and/or consultative role of the special education teacher in the reintegration of students with E/BD (e.g., classroom/instructional modifications).

Skills:

S1 Use specific behavioral management and counseling techniques in managing students with E/BD and in providing training for their parents.

Knowledge:

K4 Types and importance of information generally available from family, school officials, legal system, departments of social and health services, and mental health agencies.

K5 Role of professional groups and referral agencies in identifying, assessing, and providing services to children and youth with E/BD (e.g., mental health, corrections).

Skills:

BD: Emotional/Behavioral Disorders
8. Professionalism and Ethical Practices

Knowledge:

K1 Consumer and professional organizations, publications, and journals relevant to the field of E/BD.

Skills:

S1 Participate in the activities of professional organizations relevant to the field of E/BD.

CEC Knowledge and Skills for All Beginning Special Education Teachers of Students with Gifts or Talents

KNOWLEDGE AND SKILLS STATEMENTS

GT: Gifted Education
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge:

K1 The historical foundations and classic studies, including the major contributors, that undergird the growth of knowledge and practices in the field of gifted education.

K2 Current educational definitions of students with gifts and talents, including identification criteria, labeling issues, and current incidence and prevalence figures.

K3 Policies and issues at the national, state, and local levels that affect the education of students with gifts or talents.

K4 The impact of various educational placement options on individual students with gifts and talents with regard to cultural identity or economic class and physical, linguistic, academic and social-emotional development.

Skills:

S1 Articulate the pros and cons of current issues and trends in special education and the field of gifted education.

GT: Gifted Education
2. Characteristics of Learners

Knowledge:

K1 Cognitive processing and affective characteristics of learners gifted in intellectual, creative, leadership, specific academic, visual/performing arts, and psychomotor domains.

K2 Enrichment and acceleration needs of gifted learners in required subject areas as compared with the needs of the general population of learners.

Skills:

(None in addition to Common Core.)

Knowledge:

K3 Cognitive and affective characteristics of "twice exceptional" special populations of gifted learners, such as culturally diverse, economically disadvantaged learners with learning, physical, or behavioral disabilities.

K4 The impact of multiple exceptionalities that result in additional sensory, motor, and/or learning needs.

K5 Effects of families and/or primary caregivers on the overall development of the child.

Skills:

GT: Gifted Education
3. Assessment, Diagnosis, and Evaluation

Knowledge:

K1 Specialized terminology used in the assessment of students with gifts and talents.

K2 Legal provisions, regulations, and guidelines regarding unbiased assessment and the use of instructional assessment measures with students with gifts and talents.

K3 Specialized policies regarding referral and placement procedures for students with gifts and talents.

Skills:

S1 Identify defensible (comprehensive, systematic, objective) and equitable procedures for identifying and placing learners with gifts and talents in appropriate programs and services.

S2 Use exceptionality-specific assessment instruments, both formal and informal, including learner interviews, for assessing students with gifts and talents.

S3 Evaluate learner products and portfolios appropriately.

GT: Gifted Education
4. Instructional Content and Practice

Knowledge:

K1 Research-supported instructional strategies and practices (e.g., conceptual development, accelerated presentation pace, minimal drill and practice) for students with gifts or talents.

K2 Sources of specialized materials for students with gifts or talents.

K3 Processes for designing opportunities for learners with gifts and talents to participate in community-based service learning for the development of ethics and social responsibility.

Skills:

S1 Design cognitively complex discussion questions, projects, and assignments that promote reflective, evaluative, nonentrenched thinking in students with intellectual or academic gifts or talents.

S2 Select instructional model(s) appropriate to teaching topics, content area, or subject domain.

S3 Use instructional models; topic/domain instructional model matches commonly implemented in teaching gifted learners; and cognitive, creative, affective, and ethical taxonomies in order for higher levels to be addressed through instructional strategies.

GT: Gifted Education
5. Planning and Managing the Teaching and Learning Environment

Knowledge:

K1 Research-supported ability and achievement grouping practices and model programs, including career/vocational and transition (e.g., mentorships), that have been effective for students with gifts and talents.

K2 Curriculum and program planning models and research-supported accelerated practices that have been effective for students with gifts or talents.

Skills:

S1 Monitor and evaluate program activities for the purpose of continued program development or refinement.

GT: Gifted Education
6. Managing Student Behavior and Social Interaction Skills

Knowledge:

(None in addition to Common Core.)

Skills:

(None in addition to Common Core.)

GT: Gifted Education
7. Communication and Collaborative Partnerships

Knowledge:

K1 Sources of unique services, networks, and organizations for students with gifts or talents.

K2 Principles of communication and collaboration and the role of the teacher within the various team models (e.g., multidisciplinary, interdisciplinary, transdisciplinary).

Skills:

(None in addition to Common Core.)

GT: Gifted Education
8. Professionalism and Ethical Practices

Knowledge:

K1 Consumer and professional organizations, publications, and journals relevant to the field of gifted education.

Skills:

S1 Maintain knowledge of current research and literature in the field of special education and gifted education.

CEC Knowledge and Skills for All Beginning Special Education Teachers of Students with Learning Disabilities

KNOWLEDGE AND SKILLS STATEMENTS

LD: Learning Disabilities
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge:

K1 The historical foundations and classic studies, including the major contributors and advocacy organizations, that undergird the growth and improvement of knowledge and practices in the field of education of individuals who have learning disabilities.

K2 The evolution of the term *learning disability* as it relates to medicine, psychology, behavior, and education.

K3 Current and past philosophies and theories guiding the field of education of individuals who have learning disabilities.

K4 Future trends in the field of education of individuals who have learning disabilities.

K5 The influence of major legislation that affects individuals who have learning disabilities and the influence on practice.

K6 Current educational definitions of individuals with learning disabilities, including identification criteria, labeling issues, and current incidence and prevalence figures.

Skills:

S1 Articulate the factors that influence overrepresentation of culturally and linguistically diverse individuals in programs for individuals with learning disabilities.

S2 Articulate the pros and cons of current issues and trends in special education and the field of learning disability.

LD: Learning Disabilities
2. Characteristics of Learners

Knowledge:

K1 The various etiologies of conditions affecting individuals with learning disabilities.

K2 The medical factors influencing individuals with learning disabilities, including medication, nutrition, genetics, and neurology.

Skills:

(None in addition to Common Core.)

Knowledge:

K3 The psychological characteristics of individuals with learning disabilities, including intelligence, perception, memory, thinking skills, and language development.

K4 The relationship between individuals with learning disabilities and other associated conditions, including attention deficit disorder, attention deficit with hyperactivity, and dyslexia.

K5 The social/emotional aspects of individuals with learning disabilities, including social imperceptiveness, juvenile delinquency, and learned helplessness.

Skills:

LD: Learning Disabilities
3. Assessment, Diagnosis, and Evaluation

Knowledge:

K1 Specialized terminology used in the assessment of individuals who have learning disabilities.

K2 Legal provisions, regulations, and guidelines regarding unbiased assessment and use of instructional assessment measures with individuals who have learning disabilities.

K3 Specialized policies regarding referral and placement procedures for individuals who have learning disabilities.

Skills:

S1 Choose and administer assessment instruments appropriately for individuals with learning disabilities.

LD: Learning Disabilities
4. Instructional Content and Practice

Knowledge:

K1 The impact of listening skills on the development of critical thinking, reading comprehension, and oral and written language.

K2 The impact of language development on the academic and social skills of individuals with learning disabilities.

K3 The impact of learning disabilities on auditory skills, including perception, memory, and comprehension.

Skills:

S1 Use effective instructional strategies for basic skills, including listening, reading, writing, reporting, and computing.

S2 Use effective instructional strategies for applying various study skills to academic areas.

S3 Use skills to enhance thinking processes.

S4 Use skills to enhance vocabulary development.

S5 Use appropriate reading methods for individuals who have learning disabilities.

Knowledge:

K4 The relationship between learning disabilities and reading instruction, including reading purpose, rate, accuracy, fluency, and comprehension.

K5 The impact of social skills on the lives of individuals who have learning disabilities.

K6 Sources of specialized materials for individuals with learning disabilities.

K7 Various test-taking strategies used by individuals with learning disabilities.

K8 Alternatives for teaching skills and strategies to individuals with learning disabilities who differ in degree and kind of disability.

Skills:

S6 Use appropriate spelling methods and instructional strategies for individuals who have learning disabilities.

S7 Assist individuals who have learning disabilities in the prediction and detection of errors in oral and written language.

S8 Use appropriate handwriting methods and instructional strategies for individuals with learning disabilities.

S9 Use decision criteria for when to teach manuscript versus cursive writing for individuals with learning disabilities.

S10 Use appropriate math methods and instructional strategies including articulation, practice, immediate feedback, and review, for individuals who have learning disabilities and who show patterns of error.

S11 Use research-supported instructional strategies and practice for teaching individuals with learning disabilities.

S12 Modify speed of presentation and use organization cues.

S13 Integrate appropriate teaching strategies and instructional approaches to provide effective instruction in academic and nonacademic areas for individuals with learning disabilities.

LD: Learning Disabilities
5. Planning and Managing the Teaching and Learning Environment

Knowledge:

(None in addition to Common Core.)

Skills:

(None in addition to Common Core.)

LD: Learning Disabilities
6. Managing Student Behavior and Social Interaction Skills

Knowledge:

(None in addition to Common Core.)

Skills:

S1 Design a learning environment for individuals with learning disabilities that provides feedback from peers and adults.

LD: Learning Disabilities
7. Communication and Collaborative Partnerships

Knowledge:

K1 Sources of unique services, networks, and organizations for individuals with learning disabilities, including career/vocational support.

Skills:

(None in addition to Common Core.)

LD: Learning Disabilities
8. Professionalism and Ethical Practices

Knowledge:

K1 Consumer and professional organizations, publications, and journals relevant to the field of learning disabilities.

Skills:

S1 Articulate the learning disability teacher's ethical responsibility to nonidentified individuals who function similarly to individuals who have learning disabilities (e.g., at-risk individuals).

S2 Participate in the activities of professional organizations relevant to the field of learning disabilities.

CEC Knowledge and Skills for All Beginning Special Education Teachers of Students with Mental Retardation and Developmental Disabilities

KNOWLEDGE AND SKILLS STATEMENTS

MR: Mental Retardation/Developmental Disabilities
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge:

K1 Current educational definitions of students/individuals with mental retardation/ developmental disabilities, including identification criteria, labeling issues, and current incidence and prevalence figures.

K2 Major perspectives on the definition/etiology of mental retardation/developmental disabilities.

K3 Continuum of placement and services available for students with mental retardation/ developmental disabilities.

K4 The historical foundations and classic studies, including the major contributors, that undergird the growth and improvement of knowledge and practices in the field of mental retardation/developmental disabilities.

Skills:

S1 Articulate the pros and cons of current issues and trends in special education and the field of mental retardation/developmental disabilities.

S2 Articulate the factors that influence the overrepresentation of culturally/linguistically diverse students in programs for individuals with mental retardation/developmental disabilities.

S3 Teach students with extensive disabilities, focusing on ability and similarities to children without disabilities.

MR: Mental Retardation/Developmental Disabilities
2. Characteristics of Learners

Knowledge:

K1 Causes and theories of intellectual disabilities and implications for prevention.

K2 Medical aspects of intellectual disabilities and their implications for learning.

K3 Medical complications and implications for student support needs, including seizure management, tube feeding, catheterization, and CPR.

Skills:

S1 Describe and define general developmental, academic, social, career, and functional characteristics of individuals with mental retardation/ developmental disabilities as they relate to levels of support needed.

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Knowledge:

K4 Psychological characteristics of students with mental retardation/developmental disabilities, including cognition, perception, memory, and language development.

K5 The social-emotional aspects of mental retardation/developmental disabilities, including adaptive behavior, social competence, social isolation, and learned helplessness.

Skills:

MR: Mental Retardation/Developmental Disabilities
3. Assessment, Diagnosis, and Evaluation

Knowledge:

K1 Legal provisions, regulations, and guidelines regarding unbiased assessment and use of instructional assessment measures with students with mental retardation/developmental disabilities.

K2 Specialized terminology used in the assessment of students with mental retardation/developmental disabilities.

K3 Conditions and assessment instruments that ensure maximum performance for students with mental retardation/developmental disabilities.

K4 Adaptive behavior assessment.

K5 Specialized policies regarding referral and placement procedures for students with mental retardation/developmental disabilities.

Skills:

S1 Use exceptionality-specific assessment instruments such as adaptive skills assessments and developmental screening assessments.

S2 Adapt and modify existing assessment tools and methods to accommodate the unique abilities and needs of students with mental retardation/developmental disabilities, including ecological inventories, portfolio assessments, functional assessments, and future-based assessments.

MR: Mental Retardation/Developmental Disabilities
4. Instructional Content and Practice

Knowledge:

K1 Sources of specialized materials for students with mental retardation/developmental disabilities.

K2 Assistive devices for individuals with special needs.

K3 Approaches to create positive learning environments for individuals with special needs.

Skills:

S1 Utilize research-supported instructional strategies and practices, including the functional embedded skills approach, community-based instruction, task analysis, multisensory, and concrete/manipulative techniques.

S2 Design and implement sensory stimulation programs for individuals with extensive needs.

Knowledge:

Skills:

S3 Teach culturally responsive functional life skills relevant to independence in the community, personal living, and employment, including accessing public transportation, cooking, shopping, laundry, functional reading, and sexuality.

S4 Design age appropriate instruction based on the adaptive skills of students with mental retardation/ developmental disabilities.

S5 Integrate selected related services into the instructional day of students with mental retardation/developmental disabilities.

S6 Provide instruction in community-based settings.

S7 Assist students in the use of alternative and augmentative communication systems.

S8 Use appropriate physical management techniques, including positioning, handling, lifting, relaxation, and range of motion.

S9 Use and maintain orthotic, prosthetic, and adaptive equipment effectively.

MR: Mental Retardation/Developmental Disabilities
5. Planning and Managing the Teaching and Learning Environment

Knowledge:

K1 Model programs, including career/vocational and transition, that have been effective for individuals with mental retardation/developmental disabilities.

Skills:

S1 Structure the physical environment to provide optimal learning for students with mental retardation/developmental disabilities.

S2 Demonstrate the ability to teach students with mental retardation/developmental disabilities in a variety of placement settings.

MR: Mental Retardation/Developmental Disabilities
6. Managing Student Behavior and Social Interaction Skills

Knowledge:

K1 Theories of behavior problems in individuals with mental retardation/developmental disabilities, including self-stimulation and self-abuse.

K2 Impact of multiple disabilities on behavior.

Skills:

S1 Design, implement, and evaluate instructional programs that enhance the student's social participation in family, school, and community activities.

MR: Mental Retardation/Developmental Disabilities
7. Communication and Collaborative Partnerships

Knowledge:

K1 Sources of unique services, networks, and organizations for students/individuals with mental retardation/developmental disabilities.

Skills:

S1 Assist students, with the support of parents and other professionals, in planning for transition to adulthood including employment and community and daily life, with maximum opportunities for full participation in the community and decision making.

MR: Mental Retardation/Developmental Disabilities
8. Professionalism and Ethical Practices

Knowledge:

K1 Consumer and professional organizations, publications, and journals relevant to the field of mental retardation/developmental disabilities.

Skills:

S1 Participate in the activities of professional organizations relevant to the field of mental retardation/developmental disabilities.

CEC Knowledge and Skills for All Beginning Special Education Teachers of Students with Physical and Health Disabilities

KNOWLEDGE AND SKILLS STATEMENTS

PH: Physical and Health Disabilities
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge:

K1 Current educational definitions of individuals with physical and health disabilities including identification criteria, labeling issues, and current incidence and prevalence figures.

K2 Historical foundations and classic studies, including the major contributors, that undergird the growth and improvement of knowledge and practices in the field of special education and related services for individuals with physical and health disabilities and their families.

K3 Contemporary issues in special education and related services for individuals with physical and health disabilities and their families.

K4 Laws, regulations, and policies related to the provision of specialized health care in the educational setting.

Skills:

S1 Articulate the service delivery for individuals with physical and health disabilities and its relation to contemporary educational placement and instructional content.

PH: Physical and Health Disabilities
2. Characteristics of Learners

Knowledge:

K1 Implications of physical and health disabilities on psychosocial, educational, vocational, and leisure outcomes for individuals, families, and society.

K2 Generic medical terminology used to describe the impact of physical and health disabilities.

Skills:

(None in addition to Common Core.)

Knowledge:

K3 Etiology and characteristics of physical and health disabilities across the life span.

K4 Secondary health care issues that accompany specific physical and health disabilities.

Skills:

PH: Physical and Health Disabilities
3. Assessment, Diagnosis, and Evaluation

Knowledge:

K1 Specialized terminology used in the assessment of individuals with physical and health disabilities.

K2 Legal provisions, regulations, and guidelines regarding unbiased assessment and use of instructional assessment measures of individuals with physical and health disabilities.

K3 Specialized policies regarding referral and placement procedures for students with physical and health disabilities.

Skills:

S1 Modify and adapt assessment procedures for use with individuals with physical and health disabilities.

S2 Develop and use a technology plan based on adaptive technology assessment.

S3 Assess reliable method(s) of response of individuals who lack typical communication and performance abilities.

S4 Use results of specialized evaluations, such as oral motor, reflex, and movement, to make instructional decisions for individuals with physical and health disabilities.

PH: Physical and Health Disabilities
4. Instructional Content and Practice

Knowledge:

K1 Research-supported instructional practices, strategies, and adaptations necessary to accommodate the physical and communication characteristics of students with physical and health disabilities.

K2 Sources of specialized materials, equipment, and assistive technology for students with physical and health disabilities.

Skills:

S1 Interpret sensory, mobility, reflex, and perceptual information to create appropriate learning plans for individuals with physical and health disabilities.

S2 Use appropriate adaptations and assistive technology such as switches, adapted keyboards, and alternative positioning to allow students with physical and health disabilities full participation and access to the core curriculum.

S3 Adapt lessons that minimize the physical exertion of individuals with specialized health care needs.

S4 Design and implement an instructional program that addresses instruction in independent living skills, vocational skills, and career education for students with physical and health disabilities, emphasizing positive self-concepts and realistic goals.

Knowledge:

Skills:

S5 Design and implement curriculum and instructional strategies for medical self-management procedures by students with specialized health care needs.

S6 Participate in the selection and implementation of augmentative or alternative communication devices and systems, including sign language, electronic devices, picture and symbol systems, and language boards, for use with students with physical and health disabilities.

PH: Physical and Health Disabilities
5. Planning and Managing the Teaching and Learning Environment

Knowledge:

K1 School setting adaptations necessary to accommodate the needs and abilities of individuals with physical and health disabilities.

K2 Appropriate use of assistive devices to meet the needs of individuals with physical and health disabilities.

K3 Specialized health care practices, first aid techniques, and other medically relevant interventions necessary to maintain the health and safety of students in a variety of educational settings.

K4 Common environmental and personal barriers that hinder accessibility and acceptance of individuals with physical and health disabilities.

Skills:

S1 Use local, community, and state resources available to assist in programming for individuals with physical and health disabilities.

S2 Coordinate activities of related services personnel to maximize direct instruction time for individuals with physical and health disabilities.

S3 Use techniques of physical positioning and management of individuals with physical and health disabilities to ensure participation in academic and social environments.

S4 Demonstrate appropriate body mechanics to ensure student and teacher safety in transfer, lifting, positioning, and seating.

S5 Use appropriate adaptive equipment such as wedges, seat inserts, and standers to facilitate positioning, mobility, communication, and learning for individuals with physical and health disabilities.

S6 Use positioning techniques that decrease inappropriate tone and facilitate appropriate postural reactions to enhance participation.

S7 Practice recommended universal precautions to maintain healthy environments.

Knowledge:

Skills:

S8 Assist individuals to develop a sensitivity toward those who have communicable diseases.

S9 Monitor the effects of medication on individual performance.

S10 Integrate an individual's health care plan into daily programming.

PH: Physical and Health Disabilities
6. Managing Student Behavior and Social Interaction Skills

Knowledge:

K1 Communication and social interaction alternatives for individuals who are nonspeaking.

Skills:

(None in addition to Common Core.)

PH: Physical and Health Disabilities
7. Communication and Collaborative Partnerships

Knowledge:

K1 Sources of unique services, networks, and organizations for individuals with physical and health disabilities.

K2 Roles and responsibilities of school-based medical and related services personnel (physical and occupational therapists, adapted physical education specialists, etc.).

K3 Roles and responsibilities of community-based medical and related services personnel (physicians, prosthetics, rehabilitation engineers, etc.).

Skills:

S1 Collaborate with service providers regarding acquisition, development, modification, and evaluation of assistive technology, procedures, and curricula to assist in meeting functional, social, educational, and technological needs of students with physical and health disabilities.

S2 Use strategies to work with chronically ill and terminally ill individuals and their families.

PH: Physical and Health Disabilities
8. Professionalism and Ethical Practices

Knowledge:

K1 Rights to privacy, confidentiality, and respect for differences among all persons interacting with individuals with physical and health disabilities.

K2 Consumer and professional organizations, agencies, publications, and journals relevant to the field of physical and health disabilities.

K3 Types and transmission routes of infectious disease.

Skills:

S1 Participate in transdisciplinary team activities in providing integrated care for individuals with physical and health disabilities, particularly when students are transitioning from home, hospital, or rehabilitation facility to school.

S2 Maintain confidentiality of medical records and respect for privacy of individuals with physical and health disabilities.

S3 Practice appropriate universal precautions when interacting with individuals with physical and health disabilities.

S4 Seek information regarding protocols, procedural guidelines, and policies designed to assist individuals with physical and health disabilities as they participate in school and community-based activities.

S5 Participate in the activities of professional organizations relevant to the field of physical and health disabilities.

CEC Knowledge and Skills for All Beginning Special Education Teachers of Students with Visual Impairments

KNOWLEDGE AND SKILLS STATEMENTS

VI: Visual Impairment
1. Philosophical, Historical, and Legal Foundations of Special Education

Knowledge:

K1 Federal entitlements (e.g., American Printing House for the Blind Quote Funds) that relate to the provision of specialized equipment and materials for learners with visual impairments.

K2 Historical foundations for education of children with visual impairments, including the array of service options.

K3 Current educational definitions of students with visual disabilities, including identification criteria, labeling issues, and current incidence and prevalence figures.

Skills:

S1 Articulate the pros and cons of current issues and trends in special education visual impairment.

VI: Visual Impairment
2. Characteristics of Learners

Knowledge:

K1 Normal development of the human visual system.

K2 Basic terminology related to the structure and function of the human visual system.

K3 Basic terminology related to diseases and disorders of the human visual system.

K4 Development of secondary senses (hearing, touch, taste, smell) when the primary sense is impaired.

K5 The effects of a visual impairment on early development (motor system, cognition, social/emotional interactions, self-help, language).

Skills:

(None in addition to Common Core.)

Knowledge:

K6 The effects of a visual impairment on social behaviors and independence.

K7 The effects of a visual impairment on language and communication.

K8 The effects of a visual impairment on the individual's family and the reciprocal impact on the individual's self-esteem.

K9 Psychosocial aspects of a visual impairment.

K10 Effects of medications on the visual system.

K11 The impact of additional exceptionalities on students with visual impairments.

Skills:

VI: Visual Impairment
3. Assessment, Diagnosis, and Evaluation

Knowledge:

K1 The impact of visual disorders on learning and experience.

K2 Specialized terminology used in assessing individuals with visual impairments, both as it relates to the visual system and in areas of importance.

K3 Ethical considerations and legal provisions, regulations, and guidelines (federal, state/provincial, and local) related to assessment of students with visual impairments (including the legal versus functional definitions of blindness and low vision).

K4 Specialized policies regarding referral and placement procedures for students with visual impairments.

K5 Procedures used for screening, prereferral, referral, and classifications of students with visual impairments, including vision screening methods, functional vision evaluation, and learning media assessment.

K6 Alternative assessment techniques for students who are blind or who have low vision.

K7 Appropriate interpretation and application of scores obtained as a result of assessing individuals with visual impairments.

K8 Relationships among assessment, IEP development, and placement as they affect vision-related services.

Skills:

S1 Interpret eye reports and other vision-related diagnostic information.

S2 Use disability-specific assessment instruments appropriately (e.g., Blind Learning Aptitude Test, Tactile Test of Basic Concepts, Diagnostic Assessment Procedure).

S3 Adapt and use a variety of assessment procedures appropriately when evaluating individuals with visual impairments.

S4 Create and maintain disability-related records for students with visual impairments.

S5 Gather background information about academic, medical, and family history as it relates to the student's visual status for students with visual impairments.

S6 Develop individualized instructional strategies to enhance instruction for learners with visual impairments, including modifications of the environment, adaptations of materials, and disability-specific methodologies.

VI: Visual Impairment
4. Instructional Content and Practice

Knowledge:

K1 Methods for the development of special auditory, tactual, and modified visual communication skills for students with visual impairments, including:

- Braille reading and writing.
- Handwriting for students with low vision and signature writing for students who are blind.
- Listening skills and compensatory auditory skills.
- Typing and keyboarding skills.
- The use of unique technology for individuals with visual impairments.
- The use of alternatives to nonverbal communication.

K2 Methods to acquire disability-unique academic skills, including:

- The use of an abacus.
- The use of a talking calculator.
- Tactile graphics (including maps, charts, tables, etc.).
- Adapted science equipment.

K3 Methods for the development of basic concepts needed by young students who do not learn visually.

K4 Methods for the development of visual efficiency, including instruction in the use of print adaptations, optical devices, and nonoptical devices.

K5 Methods to develop alternative reasoning and decision-making skills in students with visual impairments.

K6 Methods to develop alternative organization and study skills for students with visual impairments.

K7 Methods to prepare students with visual impairments for structured precane orientation and mobility assessment and instruction.

Skills:

S1 Interpret and use unique assessment data for instructional planning with students with visual impairments.

S2 Choose and use appropriate technologies to accomplish instructional objectives for students with visual impairments, and integrate the technologies appropriately into the instructional process.

S3 Sequence, implement, and evaluate individual disability-related learning objectives for students with visual impairments.

S4 Use strategies for facilitating the maintenance and generalization of disability-related skills across learning environments for students with visual impairments.

S5 Teach students who have visual impairments to use thinking, problem-solving, and other cognitive strategies to meet their individual learning needs.

Knowledge:

K8 Methods to develop tactual perceptual skills for students who are or will be primarily tactual learners.

K9 Methods to teach human sexuality to students who have visual impairments, using tactual models that are anatomically accurate.

K10 Methods to develop adapted physical and recreation skills for individuals who have visual impairments.

K11 Methods to develop social and daily living skills that are normally learned or reinforced by visual means.

K12 Strategies for developing career awareness in and providing vocational counseling for students with visual impairments.

K13 Strategies for promoting self-advocacy in individuals with visual impairments.

K14 Functional life skills instruction relevant to independent, community, and personal living and employment for individuals with visual impairments including:

- Methods for accessing printed public information.
- Methods for accessing public transportation.
- Methods for accessing community resources.
- Methods for acquiring practical skills (e.g., keeping personal records, time management, personal banking, emergency procedures).

K15 Sources of specialized materials for students with visual impairments.

K16 Techniques for modifying instructional methods and materials for students with visual impairments, and assisting classroom teachers in implementing these modifications.

Skills:

VI: Visual Impairment
5. Planning and Managing the Teaching and Learning Environment

Knowledge:

K1 A variety of input and output enhancements to computer technology that address the specific access needs of students with visual impairments in a variety of environments.

K2 Model programs, including career-vocational and transition, that have been effective for students with visual impairments.

Skills:

S1 Prepare modified special materials (e.g., in Braille, enlarged, outlined, highlighted) for students who have visual impairments.

S2 Obtain and organize special materials to implement instructional goals for learners with visual impairments.

S3 Design learning environments that are multisensory and that encourage active participation by learners with visual impairments in a variety of group and individual learning activities.

S4 Create a learning environment that encourages self-advocacy and independence for students with visual impairments.

S5 Transcribe, proofread, and interline grade II Braille and Nemeth code Braille materials.

S6 Use Braillewriter, slate and stylus, and computer technology to produce Braille materials.

VI: Visual Impairment
6. Managing Student Behavior and Social Interaction Skills

Knowledge:

K1 Teacher attitudes and behaviors that affect the behaviors of students with visual impairments.

Skills:

S1 Prepare students with progressive eye conditions to achieve a positive transition to alternative skills.

S2 Prepare students who have visual impairments to access information and services from the community at large.

S3 Prepare students who have visual impairments to respond to societal attitudes and actions with positive behavior, self-advocacy, and a sense of humor.

VI: Visual Impairment
7. Communication and Collaborative Partnerships

Knowledge:

K1 Strategies for assisting parents and other professionals in planning appropriate transitions for students who have visual impairments.

K2 Sources of unique services, networks, and organizations for students with visual impairments.

K3 Roles of paraprofessionals who work directly with students who have visual impairments (e.g., sighted readers, transcribers, aides) or who provide special materials to them.

K4 Need for role models who have visual impairments, and who are successful.

Skills:

S1 Help parents and other professionals to understand the impact of a visual impairment on learning and experience.

S2 Report disability-related results of evaluations to students who have visual impairments, their parents and administrators and other professionals in clear, concise, "laymen's" terms.

S3 Manage and direct the activities of paraprofessionals or peer tutors who work with students who have visual impairments.

VI: Visual Impairment
8. Professionalism and Ethical Practices

Knowledge:

K1 Consumer and professional organizations, publications, and journals relevant to the field of visual impairment.

Skills:

S1 Belong to and participate in the activities of professional organizations in the field of visual impairment.

Part III

Guidelines for CEC Approval of Special Education Professional Preparation Programs

Overview of Guidelines

The following Guidelines are used by CEC to evaluate special education professional preparation programs to determine whether or not such programs meet CEC's Standards for the Preparation of Special Education Personnel. CEC grants program approval through two procedures. First, a college or university that is seeking to have its education unit accredited through the National Council for Accreditation of Teacher Education (NCATE) sends a folio containing necessary information on its special education program to NCATE for the CEC review. Second, a college or university may apply directly to CEC for review of its special education program. The Guidelines have the following three components:

- Institutional requirements.
- Special education program requirements.
- Areas of specialization program requirements.

How were the Guidelines developed?

In 1983 the CEC Delegate Assembly adopted CEC Standards for the Preparation of Special Education Personnel. Based on these Standards CEC developed CEC/NCATE Guidelines for CEC Program Approval of Undergraduate or Basic Programs and CEC/NCATE Guidelines for CEC Program Approval of Graduate or Advanced Programs. These Guidelines were adopted by NCATE in 1985. The guidelines were revised in 1991. In 1992 CEC adopted Non-NCATE Guidelines for Program Approval for Institutions of Higher Education (IHEs) that wanted CEC approval of their special education program but did not choose to seek NCATE accreditation. These Guidelines were amended in 1993. For the past decade CEC has reviewed over 1,500 special education programs in over 300 IHEs using guidelines that were fundamentally process oriented. The guidelines set forth a process for colleges and universities to identify the professional roles they were preparing students to fulfill, the knowledge and skills they expect the students to master and evidence that they were teaching the students these knowledge and skills. Thus, for example, CEC might review and approve two programs to prepare teachers of students who are gifted and talented where the students learned very different things.

In 1989 the CEC Delegate Assembly charged CEC and its Divisions to develop the knowledge and skills that all beginning special educators should possess. The Professional Standards and Practice Standing Committee established a Subcommittee on Knowledge and Skills, cochaired by Barbara Sirvis, of New York, and Bill Swan, of Georgia, and composed of CEC division representatives and past CEC Teachers of the Year. It set out to accomplish the following two major tasks:

- Identify a common core of knowledge and skills for all beginning special education teachers.
- Create specialty sets of knowledge and skills that are necessary to teach in a particular area of exceptionality or age group.

The Subcommittee gathered materials from literature; state, provincial, and local governments; institutions of higher education; and elsewhere. The Subcommittee then identified and organized thousands of competencies into major categories, culled them down to 195 statements, and determined the importance of each by surveying a 1,000-person sample of CEC's membership. Based on the response (54%), the Subcommittee reduced the number of statements to 107.

CEC adopted these validated statements, which became *The CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers*, published in the fall 1992 issue of *TEACHING Exceptional Children*.

Alan Koenig, of Texas, assumed the chairmanship of the Subcommittee on Knowledge and Skills in 1992 began developing specialty sets of knowledge and skills to supplement the Common Core. The exceptionality- and age-specific CEC divisions took the lead, developing sets of knowledge and skills necessary to teach in their areas of specialization. The Subcommitte worked with the divisions to ensure that the specialty sets were formatted properly and that the statements supplemented the Common Core.

The Subcommittee also developed a survey for each area of specialization, which was sent to a stratified random sample of the division's membership. Each survey was composed of at least half teachers and other direct service providers. Modifications were made in consultation with the division. Generally, there was a high level of concurrence with the work the division produced.

The Early Childhood Special Education specialization area knowledge and skills statements are taken from a concept paper, jointly approved by CEC's Division for Early Childhood, the National Association for the Education of Young Children, and the Association of Teacher Educators, *Personnel Standards for Early Education and Early Intervention: Guidelines for Licensure in Early Childhood Special Education* (DEC, NAEYC, & ATE, 1995). The content standards portion of the paper, however, has been reformatted to maintain consistency with CEC's eight categories of knowledge and skills statements for this publication. In its approved format, the concept paper included standards categories of (a) child development and learning, (b) curriculum development and implementation, (c) family and community relationships, (d) assessment and evaluation, (e) field experiences, and (f) professionalism. These six categories were selected to promote consistency with the *NAEYC Guidelines for Preparation of Early Childhood Professionals* (NAEYC, 1991) and to facilitate states' using the option to develop combined certifications. The concept paper in this latter format is disseminated by DEC, NAEYC, and ATE. All of the performance standards, with the exception of the field experiences standards, were included and grouped under one of the eight CEC knowledge and skills category headings. The field experiences standards were incorporated into the CEC/NCATE Guidelines for CEC Program Approval of Undergraduate or Basic Programs. The reader should note that performance standards are based on the notion that the individual can demonstrate ability to perform in authentic situations. Although the emphasis is on performance, the implication is that individuals have the knowledge base to apply skills in specific situations. The performance standards, therefore, are grouped as skills. Because of this, knowledge statements are not included in the Early Childhood Special Education specialization section. It is important, however, to emphasize that the early childhood and early childhood special education knowledge bases support these skills statements.

The Accreditation Subcommittee of the Professional Standards and Practice Standing Committee incorporated the knowledge and skills into the CEC accreditation standards. The knowledge and skills were formatted into matrices and added to the existing guidelines about faculty, resources, students, the special education program relationship to the education unit and its mission, and the institution's accreditation.

In 1996, after initial publication, comments were received from the field regarding the knowledge and skills statements and the institutional and program requirements. After review of all of the comments, CEC approved in the spring of 1996 a number of technical and clarifying changes. These are included in this edition.

Should all special education professional preparation programs seek CEC approval?

CEC believes that all colleges and universities that prepare special education professionals should do so in a manner consistent with the standards of our profession. Thus, all special education programs in colleges and universities, particularly those in the United States and Canada, should be approved by CEC. We also support the view that the education professional preparation programs in the United States should be accredited by NCATE.

Do these Guidelines apply to programs administered outside the special education unit?

Yes. These guidelines are for all programs that prepare professionals in the education of children with exceptionalities without regard to where they are housed in the college or university. For example some, early childhood special education and gifted and talented programs are located outside the special education unit. These programs should complete the appropriate requirements and be submitted as part of the total folio.

What are some of the benefits IHEs and their students receive from going through the program approval process?

Some of the benefits include the following:

- Most IHEs that have gone through the process report that it helped them clarify and improve their programs.

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- Lists of approved programs are published by CEC and disseminated to the CEC membership and individuals seeking information about special education professional preparation programs.
- Approved programs are cited in *Directory of Programs for Preparing Individuals for Careers in Special Education 1995 Edition.*
- CEC provides the special education program with a certificate indicating that the program meets the professional standards of CEC.
- Certificates are available for students who graduate from approved programs stating that they have graduated from a CEC-approved professional preparation program.
- It is assumed that graduates from approved programs will have met the basic requirements for CEC's certification standards for entry into special education practice.

Do the CEC Guidelines constitute the totality of a high-quality special education professional preparation program?

No, CEC Guidelines are a minimum. They are designed to establish a common set of professional expectations among all professional preparation programs and the profession. We believe that high-quality programs build upon that floor using unique talents of the faculty, students, and other professionals in the community to teach the continually emerging knowledge derived from research and practice.

The Standards define the knowledge and skills a special education teacher should have. However, as the preamble to the Common Core notes, "it is assumed that a special educator who is required to teach specific subjects or content areas . . . has additional preparation, practicum experiences, and expertise in those areas."

CEC does not advocate any one model (e.g., competency-based) for teacher preparation programs. Although listings of competencies or knowledge and skills may appear to support one type of model, this is not CEC's intention. Instead, the knowledge and skills statements should be viewed as minimum requirements, with an expectation that IHEs will extend their program development and refinement.

Do the Guidelines define what a special educator should know and be able to do to perform at a level of excellence in the profession?

No, the Guidelines define the minimum essential knowledge and skills necessary for entry into practice. The CEC members who developed these Guidelines recognized that there are many things that need to be learned through practice and continuing education. All special educators are expected to continually upgrade their knowledge and skills through planned, preapproved, organized and recognized professional development activities. The CEC International Standards for Entry into Professional Practice also state that "employing agencies should provide resources to enable each professional's continuing development."

How should an IHE approach using and meeting CEC's Practicum Requirements?

High-quality practicum experiences are an essential part of any effective professional preparation program. It is through practicum experiences that students preparing for future professional roles practice and demonstrate the skills they must have to perform these roles. Thus, it is expected that the practicum experiences align with the knowledge and skills requirements in the common core and the areas of specialization. For example: Early Childhood Special Educators are prepared to provide family-centered services; thus, these practicum experiences should include opportunities to practice and demonstrate skills in this area.

CEC recognizes that there are a variety of approaches to providing practicum experiences that can be utilized to meet the varying needs of students, colleges and universities, and practicum sites. The Guidelines focus on the qualitative components of the practicum, rather than a model. The Guidelines do require that students have a minimum of 10 full-time weeks or the equivalent clock-hour composite of supervised practicum experience in the areas of specialization for which they are being prepared. If a candidate is being prepared to teach more than one area of specialization it is expected that within the practicum the student will have the opportunity to practice and demonstrate the skills required across the varying specializations for which he or she is being prepared.

The Specializations, other than those for early childhood, are by category of exceptionality. Is CEC promoting exceptionality-specific professional preparation programs?

The CEC Guidelines define what an individual must know and be able to do to teach a child with a particular exceptionality. If an individual is expected to teach students with varying exceptionalities, then that individual should have mastery of the knowledge and skills for each of those exceptionalities.

For example, if an IHE is preparing "teachers of students with mild disabilities" and expects them to work with students with learning disabilities and behavior disorders, then the program would have to show that it is preparing teachers with mastery of the knowledge and skills in both areas of specialization.

How does an IHE go about seeking CEC's review and approval of its special education professional preparation program?

An IHE that is seeking accreditation from NCATE will receive the NCATE-approved *Curriculum Guidelines for Basic and Advanced Programs in Special Education*. These Curriculum Guidelines, prepared by CEC, contain the content of the *CEC Guidelines for Program Approval of Special Education Professional Preparation Programs* except for the requirements that are assessed by NCATE through the evaluation of the overall school of education. At the time of publication the CEC Guidelines were being reviewed for adoption by NCATE.

IHEs that come directly to CEC for review of their special education professional preparation programs are required to address all of the requirements set forth in CEC Guidelines.

The special education faculty undertake a self-study process to assess their special education programs using the Guidelines. Based upon this assessment, they prepare a folio that provides documents and other evidence that the special education programs meet all of the requirements set forth in the Guidelines.

The folio is then sent to CEC, through NCATE or directly, where it is evaluated by a panel of trained field reviewers. For each requirement, panelists determine whether or not the program meets the requirement or whether insufficient information has been provided. Based upon their assessment a determination is made as to whether each program submitted by the IHE should be approved.

A report is then provided to the IHE regarding which programs have been approved and which have not, with specific reasons why. The IHE may then submit a rejoinder providing clarification, additional information, or evidence that it will make necessary program changes. The rejoinder is reviewed and a second determination is made and communicated to the IHE. The IHE may continue to repeat the process until it is resolved.

CEC at times approves programs that substantially meet the Guidelines with the understanding that specified improvements will be instituted within a specified time period.

After the folio approval, for colleges and universities not seeking NCATE accreditation, a field team of evaluators conducts a site visit to the IHE to validate the information that was provided in the folio. Based on their recommendations, CEC informs the IHE of its decision regarding approval of its special education programs.

What percentage of IHEs submitting folios to CEC receive CEC approval of their programs?

The present rate of program approval is approximately 70%.

Will the new Guidelines complicate or simplify the folio preparation efforts of IHEs?

Under the old system IHEs had to expend extensive effort to communicate in their folios the knowledge and skills taught in each of their programs and how they are taught. The new Guidelines only require the IHEs to indicate whether or not the CEC common and specialized knowledge and skills are taught. To simplify reporting, matrices are provided. By completing these forms the IHEs will significantly reduce the paperwork they previously had to provide.

What if a college or university has areas of specialization that are not among the eight areas of specialization developed by CEC?

These programs should still be submitted for review. It is expected that the program submission will

include all of the requirements set forth in the Area of Specialization Program Information Requirements and the *CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers*. In addition, the program should articulate the role definition of those completing the program and the knowledge and skills necessary to carry out that role. The knowledge and skills should be organized in the same groups as in the Common Core knowledge and skills.

If the program is preparing individuals for careers other than teaching (e.g., special education administration) and the IHE assumes that the students already possess the *Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers*, then the information submitted should include docomentation of such requirements in the IHEs admission standards.

Are there programs in colleges and universities that should not be submitted for CEC review?

The CEC Guidelines and review process are designed to evaluate programs that prepare individuals for various professional roles in special education—for example, careers in special education teaching, supervision, administration, professional preparation, research and others. However, IHEs often offer programs in continuing education that enhance knowledge and skills but do not specifically prepare the student for entry into a professional role. CEC is not currently in a position to review such programs. Likewise, CEC does not review preparation programs that do not result in certification.

Will CEC approve programs accredited by ASHA?

CEC recognizes the standards of other professional associations when those standards meet the basic requirements of our standards. After a review of the Accreditation Standards of the American-Speech-Language-Hearing Association (ASHA), CEC's Professional Standards and Practice Standing Committee determined that CEC should approve speech pathology and audiology programs that have been accredited by ASHA's Educational Standards Board. Such programs need only submit to CEC their letter of accreditation for CEC recognition. Speech-language programs not accredited by ASHA that are part of an institution seeking NCATE accreditation must submit a folio to CEC.

Will these Standards change over time?

CEC recognizes that what we need to know to practice effectively changes with advances in research and practice and that any standards will need to be updated over time. Therefore, the CEC Professional Standards and Practice Standing Committee has established a process for the continual monitoring and improvement of these Standards and consideration of amendments offered by members and CEC units.

Proposed changes should be submitted to the CEC Professional Standards and Practice Standing Committee at least 8 months prior to the annual CEC convention. Changes that are approved by the Committee for field consideration will be published for comment in a CEC publication. A stratified sample of CEC members will be surveyed as to their views on the proposed changes. The Committee will then take action on the proposal, and, if approved, it will be forwarded to the CEC Executive Director for final adoption. The Committee may make technical amendments at any time and will conduct a full-scale review of the standards at least every 5 years.

What assistance is available from CEC to assist IHEs seeking CEC program approval?

CEC's goal is to have all special education professional preparation programs meet our Guidelines. Thus, we view assisting IHEs through the folio process and helping them improve their programs as essential parts of the process. Among the various forms of assistance CEC offers are the following:

- *Instructional Manual for Preparing Folios to Meet CEC/NCATE Special Education Guidelines* (R635).
- Folio training for programs: Twice-yearly 2-day writers' workshops.
- On-site training: CEC staff are available to conduct 1-day writers' workshops with special education faculty on campus at cost.
- Technical assistance: CEC staff are available to answer e-mail and telephone inquiries.

For further information, please call 703/264-9466, TTY 703/264-9446, FAX 703/264-1637, E-mail address: cecprof@CEC.sped.org.

Institutional and Program Requirements

Provide evidence of each of the following items pertaining to the overall institution of higher education:

- The institution in which the special education program is housed is accredited by the appropriate institutional accrediting agencies.
- The institution in which the special education program is housed is an equal opportunity employer that does not discriminate on the basis of race, sex, color, religion, age, or disability (consistent with Section 702 of Title VII of the 1964 Civil Rights Act, which deals with exemptions for religious corporations, with respect to employment of individuals with specific religious convictions).

General Special Education Program Information Requirements

1. Provide a general description of the overall special education professional preparation program offered at the institution including:
   - How the program structurally and programmatically relates to the education unit.
   - The program's philosophy, rationale, knowledge base, purposes, and goals. For each area of specialization, refer to guidelines provided in the appropriate document in the reference list at the end of Part III of this document.
   - The program's relationship to the school of education's mission statement.
   - The professional role(s) the graduates from the program will be qualified to practice. For each area of specialization, refer to guidelines provided in the appropriate document in the reference list at the end of Part III of this document.
   - A brief description of each of the areas of specialization offered by the program.
2. Provide and describe the following:
   - The policies/requirements for admission of students.
   - The policies/requirements for retention of students.
   - The policies/requirements for student completion of programs.
   - The procedures used by the special education program for continuing interaction with consumers (graduates, school systems, teachers, and organizations).
3. Describe how multicultural issues are integrated throughout the program.
4. Describe the institution's process for developing a curriculum for the preparation of special education personnel including procedures for the study of the recommendations of national professional organizations (e.g., CEC, CEC divisions, American Speech-Language-Hearing Association, American Nursing Association, National Association for the Education of Young Children) as they may affect special education programs.
5. Describe the program's practicum requirements, including information that demonstrates that:
   - Field experiences are sequential in difficulty.
   - Each field experience has clearly stated, measurable objectives that relate to the overall goals and objectives of the program.
   - The field experiences involve model professionals (e.g., teachers, early interventionists) who use practices congruent with the knowledge and skills expected of the student candidate.
   - Cooperating professionals are provided guidelines that structure field experiences.
   - The student teaching experience is in the same type of settings as that for which the student candidate is seeking licensure/certification.

- The student teaching experience is with the same type of individuals as those with whom the candidate is preparing to work.
- Candidates are placed only with cooperating professionals who are appropriately licensed/certified in the specialization in which candidates are seeking certification.
- Each area of specialization provides supervision to candidates by university/college faculty qualified and experienced in teaching in the area of specialization.
- During student teaching, the supervisor from the university/college observes the candidate at least five times.
- Explicit performance criteria are established for student teaching and each field experience.
- Students have a minimum of 10 full-time weeks or the equivalent clock-hour composite (e.g., 350 clock hours) of supervised practicum/student teaching in the areas of specialization for which the candidate is being prepared.
- Knowledge and Skills required for each practicum experience reflect "recommended practices."
- Practicum experiences are supervised under a structured program of advisement.
- Each area of specialization has responsibility for assigning candidates to approved placements. This responsibility includes the approval of cooperating teachers and supervisors. Criteria for the selection and retention of such persons are in writing and subject to ongoing evaluation.
- Each area of specialization has written criteria for the selection and retention of cooperating professionals and supervisors.

6. Provide evidence of each of the following items pertaining to resources available to support an effective special education professional preparation program:
   - The budget trends for the special education programs over the past 5 years and future planning indicate continued support for special education programs.
   - Special education facilities are accessible to individuals with disabilities.
   - The special education program allocates its available resources to programs in a manner that allows each of them to meet its mission and needs.
   - Modern equipment is available to support administration, research, service, and instructional needs of the special education program.
   - Financial support provided during the last 5 years has been adequate for instructional materials and technology.
   - Library holdings provide adequate scope, breadth, and currency to support the special education program.
   - An identifiable and relevant media and materials collection is accessible to special education students and faculty.
   - Systematic reviews of library and media materials are conducted periodically and are used to make acquisitions decisions by the special education program.
   - Necessary supplies are provided to support special education faculty, students, staff, and administration in the operation and implementation of programs, policies, and procedures.
7. Provide evidence of each of the following items pertaining to maintaining an effective special education faculty:
   - The teaching load of undergraduate special education faculty is no more than the equivalent of 12 semester/quarter hours, and the teaching load of graduate special education faculty is no more than the equivalent of 9 semester/quarter hours.
   - Faculty work load assignments accommodate faculty involvement in teaching, scholarship, and service.
   - Instructional resources for supervision of special education practicum experiences do not exceed a ratio of 18 full-time equivalent students to one full-time equivalent faculty member.
   - The use of part-time faculty and graduate students who teach in special educa-

tion programs is limited to prevent the fragmentation of instruction and the erosion of quality, and they are supervised by full-time faculty to ensure program integrity, quality, and continuity.

- Special education faculty view themselves as members of the training and research arms of the teaching profession.
- Special education faculty are actively involved in professional associations and professional activities at the local, state, national, and/or international levels in their areas of expertise and assignment.
- The special education faculty are regularly involved with the professional world of practice at the appropriate level of instruction (infant, toddler, preschool, elementary, and/or secondary).
- Systematic faculty development activities are provided for faculty, cooperating teachers, and others who may contribute to special education programs.
- Support for special education faculty development is at least at the level of that for other units in the institution.
- Faculty keep abreast of developing work and debates about research on teaching and special education, as well as recent scholarly work in the areas that they teach.
- Special education faculty are regularly evaluated in terms of their contributions to the areas of teaching, scholarship, and service. These evaluation data are used in determining salary, promotion, and tenure.
- Competence in teaching is evaluated through direct measures of teaching effectiveness such as student evaluations.
- Evaluations of special education faculty are systematically used to improve teaching, scholarly and creative activities, and service within the program.

8. Provide evidence of each of the following items pertaining to student recruitment, selection, and support:
   - Applicants from diverse economic, racial, and cultural backgrounds and individuals with disabilities are recruited.
   - Incentives and affirmative procedures are used to attract high-quality candidates who represent a culturally diverse population and individuals with disabilities.
   - Special education students have access to publications that describe program requirements and institutional policies, including clear statements of due process.
   - The special education program's advisory system provides special education students access to academic and professional assistance, including information about requirements needed to complete their special education programs.
   - Special education students are made aware of the availability of social and psychological counseling services within the institution.
9. Provide evidence of each of the following items pertaining to relationship to the community and local schools:
   - The special education program and local schools, early intervention settings, and agencies cooperatively develop research questions and inquiry strategies to encourage the involvement of practicing professionals with the special education faculty for further development and refinement of the professional knowledge bases.
   - Positive working relationships with local schools are developed and maintained to improve the delivery of high-quality education in the schools, early intervention settings, and agencies.
   - The special education program has developed arrangements with school districts, early intervention settings, and agencies in its geographical area.

Area of Specialization Program Requirements

1. Provide evidence that the area of specialization program provides students with each of the knowledge and skills set forth in the *CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers*. (See Matrix, pp. 74–84).

2. Provide evidence that the area of specialization program provides students with each of the knowledge and skills set forth in the appropriate *CEC Specialized Knowledge and Skills Essential for Beginning Special Education Teachers*. (See Matrix, pp. 85–144). (Note: If an institution's specialization program covers more than one of CEC's specialization areas, then a separate matrix is required for each specialization covered.)

   For specializations other than those covered by the *CEC Specialized Knowledge and Skills Essential for Beginning Special Education Teachers*, provide the knowledge and skills required by the program.

3. Provide the course of study with all required courses clearly indicated.

4. Provide a description of all field and clinical experiences, including student teaching and internships.

5. Provide evidence that the area of specialization program meets state certification requirements.

6. For advanced programs, additionally provide evidence of the following:

   - That the course work is advanced in nature; that it is a graduate course; that it meets the institution's criteria for advanced studies.
   - That no more than one third of the advanced courses are open to undergraduates.
   - That each advanced program includes the study of research methods and findings; that students are knowledgeable consumers of research data; and that graduates are prepared to engage in research activities.

CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers

Preamble

The standards of the profession of special education are a formally codified set of beliefs. These belief statements represent the special educator's principles of appropriate ethical behavior and are based on several assumptions.

One assumption is that special education has within its heritage the perspectives of advocacy for persons with exceptionalities and of embracing individual differences. These differences include the traditional consideration of the nature and effect of exceptionalities. As the community of exceptional children, youth, and adults has become increasingly diverse, these perspectives have been broadened to include other characteristics that significantly influence their quality of life. To maintain their ability to successfully function as advocates for their multicultural clients, special educators must broaden their perspectives to ensure vigilant attention to the issues of diversity. Current demographic trends clearly indicate that:

- The numbers of children and youth from culturally and linguistically diverse backgrounds served in public schools are growing rapidly.
- Cultural and linguistic diversity is expected to continue as well as to increase.
- The number of professionals who are culturally and linguistically diverse entering the special education profession has been declining even as the numbers of students who are culturally and linguistically diverse are rising.

Given the pervasive nature of diversity, professional standards are needed that guide professional practice in ways that are relevant to the multicultural populations served in special education. Specifically, these standards reflect the premise that, to design effective interventions, special educators must understand the characteristics of their learners, including factors such as culture, language, gender, religion, and sexuality. This premise has been addressed in two ways. First, most statements are inclusive in nature; that is, they identify knowledge and skills essential to effectively serve *all* exceptional learners, including those from culturally and linguistically diverse backgrounds. Second, selected items address the most critical aspects of diversity and are infused throughout the model.

Another assumption is that the sustained involvement of families and the larger community is fundamental to delivering high-quality educational services to individuals with exceptional learning needs. The knowledge and skills contained in this document should be interpreted broadly to include learners of all ages, beginning with infants and preschoolers and extending to young adults who are exiting the school program. Similarly, the term *families* should be interpreted broadly to include, as appropriate to given situations, biological mothers and fathers, adoptive parents, legal guardians, foster parents or primary caregivers, siblings, and extended family members. Finally, while not specifically stated, it is assumed that special educators may provide learning opportunities in a variety of learning environments, including the home, preschool, school, and community settings, as well as in both specialized and integrated environments.

This document focuses on the unique set of knowledge and skills needed to practice in special education, not on specific areas of exceptionality or age groupings, general educational methods, or subject matter content. Special educators who practice in a specific area (or areas) of exceptionality or age grouping must possess the exceptionality-specific knowledge and skills adopted by CEC *in addition to* the Common Core. Also, it is assumed that a special educator who is required to teach specific subjects or content areas (such as science, social studies, foreign languages, vocational education) has additional preparation, practicum experiences, and expertise in those areas.

An additional assumption is that this Common Core of Knowledge and Skills will change over time. As with the adoption of the CEC Code of Ethics, time should be provided for continuing examination, debate, and further articulation of the knowledge and skills for entry-level special educators.

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A final assumption of this Common Core of Knowledge and Skills is that the professional conduct of entry-level special educators is governed foremost by the CEC Code of Ethics. Special education professionals

- Are committed to developing the highest educational and quality of life potential of exceptional individuals.
- Promote and maintain a high level of competence and integrity in practicing their profession.
- Engage in professional activities that benefit exceptional individuals, their families, other colleagues, students or research subjects.
- Exercise objective professional judgment in the practice of their profession.
- Strive to advance their knowledge and skills regarding the education of exceptional individuals.
- Work within the standards and policies of their profession.
- Seek to uphold and improve, where necessary, the laws, regulations, and policies governing the delivery of special education and related services and the practice of their profession.
- Do not condone or participate in unethical or illegal acts, nor violate professional standards adopted by the Delegate Assembly of CEC.

It was through significant professional and personal commitment that the members of CEC crafted this product. In the process we learned not only about knowledge and skills but also about each other and developed a deep mutual respect. May those who use this Common Core of Knowledge and Skills experience that same mutual respect from all who serve children and their families.

KNOWLEDGE AND SKILLS STATEMENTS

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
CC: 1.	**Common Core Philosophical, Historical, and Legal Foundations of Special Education**	
Knowledge:		
K1	Models, theories, and philosophies that provide the basis for special education practice.	
K2	Variations in beliefs, traditions, and values across cultures within society and the effect of the relationship among child, family, and schooling.	
K3	Issues in definition and identification procedures for individuals with exceptional learning needs including individuals from culturally and/or linguistically diverse backgrounds.	
K4	Assurances and due process rights related to assessment, eligibility, and placement.	

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
K5	Rights and responsibilities of parents, students, teachers and other professionals, and schools as they relate to individual learning needs.	
Skills:		
S1	Articulate personal philosophy of special education including its relationship to/with regular education.	
S2	Conduct instructional and other professional activities consistent with the requirements of law, rules and regulations, and local district policies and procedures.	
CC: 2.	**Common Core Characteristics of Learners**	
Knowledge:		
K1	Similarities and differences among the cognitive, physical, cultural, social, and emotional needs of individuals with and without exceptional learning needs.	
K2	Differential characteristics of individuals with exceptionalities, including levels of severity and multiple exceptionalities.	
K3	Characteristics of normal, delayed, and disordered communication patterns of individuals with exceptional learning needs.	
K4	Effects an exceptional condition(s) may have on an individual's life.	
K5	Characteristics and effects of the cultural and environmental milieu of the child and the family including cultural and linguistic diversity, socioeconomic level, abuse/neglect, and substance abuse.	
K6	Effects of various medications on the educational, cognitive, physical, social, and emotional behavior of individuals with exceptionalities.	

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	Guidelines	*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
K7	Educational implications of characteristics of various exceptionalities.	
Skills:		
S1	Access information on various cognitive, communication, physical, cultural, social, and emotional conditions of individuals with exceptional learning needs.	
CC: 3.	**Common Core Assessment, Diagnosis, and Evaluation**	
Knowledge:		
K1	Basic terminology used in assessment.	
K2	Ethical concerns related to assessment.	
K3	Legal provisions, regulations, and guidelines regarding assessment of individuals.	
K4	Typical procedures used for screening, prereferral, referral, and classification.	
K5	Appropriate application and interpretation of scores, including grade score versus standard score, percentile ranks, age/grade equivalents, and stanines.	
K6	Appropriate use and limitations of each type of assessment instrument.	
K7	Incorporation of strategies that consider the influence of diversity on assessment, eligibility, programming, and placement of individuals with exceptional learning needs.	
K8	The relationship between assessment and placement decisions.	
K9	Methods for monitoring progress of individuals with exceptional learning needs.	

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
Skills:		
S1	Collaborate with families and other professionals involved in the assessment of individuals with exceptional learning needs.	
S2	Create and maintain records.	
S3	Gather background information regarding academic, medical, and family history.	
S4	Use various types of assessment procedures appropriately.	
S5	Interpret information from formal and informal assessment instruments and procedures.	
S6	Report assessment results to individuals with exceptional learning needs, parents, administrators, and other professionals using appropriate communication skills.	
S7	Use performance data and information from teachers, other professionals, individuals with exceptionalities, and parents to make or suggest appropriate modification in learning environments.	
S8	Develop individualized assessment strategies for instruction.	
S9	Use assessment information in making instructional decisions and planning individual programs that result in appropriate placement and intervention for all individuals with exceptional learning needs, including those from culturally and/or linguistically diverse backgrounds.	
S10	Evaluate the results of instruction.	
S11	Evaluate supports needed for integration into various program placements.	

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
CC: 4.	**Common Core Instructional Content and Practice**	
Knowledge:		
K1	Differing learning styles of individuals with exceptional learning needs and how to adapt teaching to these styles.	
K2	Demands of various learning environments such as individualized instruction in general education classes.	
K3	Curricula for the development of motor, cognitive, academic, social, language, affective, career, and functional life skills for individuals with exceptional learning needs.	
K4	Instructional and remedial methods, techniques, and curriculum materials.	
K5	Techniques for modifying instructional methods and materials.	
K6	Life skills instruction relevant to independent, community, and personal living and employment.	
K7	Cultural perspectives influencing the relationship among families, schools, and communities as related to effective instruction for individuals with exceptional learning needs.	
Skills:		
S1	Interpret and use assessment data for instruction.	
S2	Develop and/or select instructional content, materials, resources, and strategies that respond to cultural, linguistic, and gender differences.	
S3	Develop comprehensive, longitudinal individualized programs.	

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
S4	Choose and use appropriate technologies to accomplish instructional objectives and to integrate them appropriately into the instructional process.	
S5	Prepare appropriate lesson plans.	
S6	Involve the individual and family in setting instructional goals and charting progress.	
S7	Use task analysis.	
S8	Select, adapt, and use instructional strategies and materials according to characteristics of the learner.	
S9	Sequence, implement, and evaluate individual learning objectives.	
S10	Integrate affective, social, and career/vocational skills with academic curricula.	
S11	Use strategies for facilitating maintenance and generalization of skills across learning environments.	
S12	Use instructional time properly.	
S13	Teach individuals with exceptional learning needs to use thinking, problem-solving, and other cognitive strategies to meet their individual needs.	
S14	Choose and implement instructional techniques and strategies that promote successful transitions for individuals with exceptional learning needs.	
S15	Establish and maintain rapport with learners.	
S16	Use verbal and nonverbal communication techniques.	
S17	Conduct self-evaluation of instruction.	

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
CC: Common Core 5. Planning and Managing the Teaching and Learning Environment		
Knowledge:		
K1	Basic classroom management theories, methods, and techniques for individuals with exceptional learning needs.	
K2	Research-based best practices for effective management of teaching and learning.	
K3	Ways in which technology can assist with planning and managing the teaching and learning environment.	
Skills:		
S1	Create a safe, positive, and supportive learning environment in which diversities are valued.	
S2	Use strategies and techniques for facilitating the functional integration of individuals with exceptional learning needs in various settings.	
S3	Prepare and organize materials to implement daily lesson plans.	
S4	Incorporate evaluation, planning, and management procedures that match learner needs with the instructional environment.	
S5	Design a learning environment that encourages active participation by learners in a variety of individual and group learning activities.	
S6	Design, structure, and manage daily routines, effectively including transition time, for students, other staff, and the instructional setting.	

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
S7	Direct the activities of a classroom paraprofessional, aide, volunteer, or peer tutor.	
S8	Create an environment that encourages self-advocacy and increased independence.	
CC: 6.	**Common Core Managing Student Behavior and Social Interaction Skills**	
Knowledge:		
K1	Applicable laws, rules and regulations, and procedural safeguards regarding the planning and implementation of management of behaviors of individuals with exceptional learning needs.	
K2	Ethical considerations inherent in behavior management.	
K3	Teacher attitudes and behaviors that positively or negatively influence behavior of individuals with exceptional learning needs.	
K4	Social skills needed for educational and functional living environments and effective instruction in the development of social skills.	
K5	Strategies for crisis prevention/intervention.	
K6	Strategies for preparing individuals to live harmoniously and productively in a multiclass, multiethnic, multicultural, and multinational world.	
Skills:		
S1	Demonstrate a variety of effective behavior management techniques appropriate to the needs of individuals with exceptional learning needs.	

	Guidelines	*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
S2	Implement the least intensive intervention consistent with the needs of the individuals with exceptionalities.	
S3	Modify the learning environment (schedule and physical arrangement) to manage inappropriate behaviors.	
S4	Identify realistic expectations for personal and social behavior in various settings.	
S5	Integrate social skills into the curriculum.	
S6	Use effective teaching procedures in social skills instruction.	
S7	Demonstrate procedures to increase the individual's self-awareness, self-control, self-reliance, and self-esteem.	
S8	Prepare individuals with exceptional learning needs to exhibit self-enhancing behavior in response to societal attitudes and actions.	
CC: 7.	**Common Core Communication and Collaborative Partnerships**	
Knowledge:		
K1	Factors that promote effective communication and collaboration with individuals, parents, and school and community personnel in a culturally responsive program.	
K2	Typical concerns of parents of individuals with exceptional learning needs and appropriate strategies to help parents deal with these concerns.	
K3	Development of individual student programs working in collaboration with team members.	
K4	Roles of individuals with exceptionalities, parents, teachers, and other school and community personnel in planning an individualized program.	

	Guidelines	*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
K5	Ethical practices for confidential communication to others about individuals with exceptional learning needs.	
Skills:		
S1	Use collaborative strategies in working with individuals with exceptional learning needs, parents, and school and community personnel in various learning environments.	
S2	Communicate and consult with individuals, parents, teachers, and other school and community personnel.	
S3	Foster respectful and beneficial relationships between families and professionals.	
S4	Encourage and assist families to become active participants in the educational team.	
S5	Plan and conduct collaborative conferences with families or primary caregivers.	
S6	Collaborate with regular classroom teachers and other school and community personnel in integrating individuals with exceptional learning needs into various learning environments.	
S7	Communicate with regular teachers, administrators, and other school personnel about characteristics and needs of individuals with specific exceptional learning needs.	
CC: 8.	**Common Core Professionalism and Ethical Practices**	
Knowledge:		
K1	Personal cultural biases and differences that affect one's teaching.	

	Guidelines	*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
K2	Importance of the teacher serving as a model for individuals with exceptional learning needs.	
Skills:		
S1	Demonstrate commitment to developing the highest educational and quality-of-life potential of individuals with exceptional learning needs.	
S2	Demonstrate positive regard for the culture, religion, gender, and sexual orientation of individual students.	
S3	Promote and maintain a high level of competence and integrity in the practice of the profession.	
S4	Exercise objective professional judgment in the practice of the profession.	
S5	Demonstrate proficiency in oral and written communication.	
S6	Engage in professional activities that may benefit individuals with exceptional learning needs, their families, and/or colleagues.	
S7	Comply with local, state, provincial, and federal monitoring and evaluation requirements.	
S8	Use copyrighted educational materials in an ethical manner.	
S9	Practice within the CEC Code of Ethics and other standards and policies of the profession.	

Knowledge and Skills for All Beginning Special Education Teachers of Students Who Are Deaf or Hard of Hearing

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
DH: 1.	**Deaf or Hard of Hearing Philosophical, Historical, and Legal Foundations of Special Education**	
Knowledge:		
K1	Current educational definitions of students with hearing loss, including identification criteria, labeling issues, and current incidence and prevalence figures.	
K2	Models, theories, and philosophies (e.g., bilingual-bicultural, total communication, oral/aural) that provide the basis for educational practice(s) for students who are deaf or hard of hearing, as consistent with program philosophy.	
K3	Variations in beliefs, traditions, and values across cultures and within society, and the effect of the relationships among children who are deaf or hard of hearing, their families, and schooling.	
K4	Issues in definition and identification procedures for individuals who are deaf or hard of hearing (e.g., cultural versus medical perspective).	
K5	Rights and responsibilities (e.g., Deaf Children's Bill of Rights) of parents, students, teachers, and schools as they relate to students who are deaf or hard of hearing.	
K6	The impact of various educational placement options (from the perspective of the needs of any given child who is deaf or hard of hearing and consistent with program philosophy) with regard to cultural identity and linguistic, academic, and social-emotional development.	

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
Skills:		
S1	Apply understanding of theory, philosophy, and models of practice to the education of students who are deaf or hard of hearing.	
S2	Articulate pros and cons of current issues and trends in special education and the field of education of children who are deaf or hard of hearing.	
S3	Identify the major contributors to the growth and improvement of knowledge and practice in the field of education of children who are deaf or hard of hearing.	
DH: 2.	**Deaf or Hard of Hearing Characteristics of Learners**	
Knowledge:		
K1	Communication features (visual, spatial, tactile, and/or auditory) salient to the learner who is deaf or hard of hearing that are necessary to enhance cognitive, emotional, and social development.	
K2	Research in cognition related to children who are deaf or hard of hearing.	
K3	Cultural dimensions that being deaf or hard of hearing may add to the life of a child.	
K4	Various etiologies of hearing loss that can result in additional sensory, motor, and/or learning differences in students who are deaf or hard of hearing.	
K5	Effects of families and/or primary caregivers on the overall development of the child who is deaf or hard of hearing.	
K6	Effects that onset of hearing loss, age of identification, and provision of services have on the development of the child who is deaf or hard of hearing.	

Guidelines		*Cite courses by number; cite other documentation by page number. Provide descriptions and examples as needed.*
K7	Impact of early comprehensible communication on the development of the child who is deaf or hard of hearing.	
K8	Recognition that being deaf or hard of hearing alone does not necessarily preclude normal academic development, cognitive development, or communication ability.	
K9	The differences in quality and quantity of incidental language/learning experiences that children who are deaf or hard of hearing may experience.	
K10	Effects of sensory input on the development of language and cognition of children who are deaf or hard of hearing.	
Skills:	(None in addition to Common Core.)	
DH: 3.	**Deaf or Hard of Hearing Assessment, Diagnosis, and Evaluation**	
Knowledge:		
K1	Specialized terminology used in the assessment of children who are deaf or hard of hearing.	
K2	Components of an adequate evaluation for eligibility placement and program planning (e.g., interpreters, special tests) decisions for students who are deaf or hard of hearing.	
K3	Legal provisions, regulations and guidelines regarding unbiased diagnostic assessment, and use of instructional assessment measures with students who are deaf or hard of hearing	
K4	Special policies regarding referral and placement procedures (e.g., *Federal Policy Guidance*, October 30, 1993) for students who are deaf or hard of hearing.	

DOCUMENT RESUME

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ABSTRACT

This policy brief describes attention deficit hyperactivity disorder (ADHD) as involving three characteristics: inattention, impulsivity, and hyperactivity. The brief reviews the causes of ADHD, including the belief that it is primarily an inherited, neurobiological disorder. The effects of ADHD on children are discussed and may include: other learning, behavioral, emotional, and developmental problems; memory and organizational problems; poor self-esteem and poor social adjustment; and school failure. The diagnosis of ADHD is reviewed, including observed neurobiological differences in individuals with ADHD. The multiple methods used to diagnose ADHD are described, including: (1) interviews with the parents and child; (2) direct observation in various settings; (3) a battery of achievement and psychometric tests; and (4) feedback from parents, teachers, and others about the child's behavior. The brief addresses how ADHD is treated and the determination that a multimodal approach is best. Recommendations for schools include: procedures for identifying a student with ADHD should allow enough time to gather adequate information; modifications and accommodations should be made to assist students with ADHD; and interventions need to be proactive and focus on the prevention of negative behavior. (Contains 39 references.) (CR)

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Policy Briefs

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UNDERSTANDING AND IDENTIFYING CHILDREN WITH ADHD: FIRST STEPS TO EFFECTIVE INTERVENTION

To the average person, behavior* is a matter of choice, control, and will. Although we may not want to, we can turn off the football game to finish that report for work. When we're angry and would like to tell off a coworker, we can use self-control to keep quiet for the sake of workplace harmony. We can rely on our willpower to resist that second piece of pie, and if we fail, we can just try harder next time. We assume everyone shares these abilities. That's why the average administrator or teacher may find it difficult to understand the behavior of children with Attention-Deficit/Hyperactivity Disorder (ADHD).

Individuals with ADHD are neurobiologically different from the average person[1], and this difference interferes with their ability to inhibit, control, and direct behavior in response to environmental and situational demands[2]. The student with ADHD who runs to the window when a passing car honks or watches students passing in the hall instead of finishing math is no more choosing to disobey the rules or the teacher than the blind child is choosing not to see the blackboard.

ADHD ranks as "the most common neurobehavioral disorder of children,"[3] affecting five percent[4] (or more[5]) of the school-age population. This is one compelling reason for policymakers to know what ADHD is and understand how it affects children. Children with ADHD need supportive policies and administrative structures to help them achieve education goals and meet standards for learning. This paper discusses the characteristics and causes of ADHD, how it is diagnosed and treated, how it affects children and school performance, its history, and long-term outcomes. The next issue in the series will focus on specific school accommodations that build academic success.

◆

WHAT IS ADHD?

ADHD is a neurobiologically based disorder characterized by inappropriate levels of three observable behaviors: inattention, impulsivity, and hyperactivity.[6] It includes three primary subtypes based on these behaviors: Predominantly Inattentive Type, Predominantly Hyperactive-Impulsive Type, and Combined Type.[7] (See box for identifying criteria.) Because they rarely display hyperactivity, children with the Predominantly Inattentive Type may be overlooked or thought to be "just lazy or unmotivated."[8]

Barkley—one of the world's foremost researchers on ADHD—believes that all three characteristic behaviors result from a deeper, underlying problem.[12] "The primary problem," he says, "is really one of inhibiting behavior or controlling the impulse to respond to a situation."[9] This inability to delay a response interferes with executive functions "critical to developing self-control and directing behavior toward the future." It affects an individual's ability to delay gratification, reflect on events (hind-

The purpose of this brief is to help policymakers understand Attention-Deficit/Hyperactivity Disorder (ADHD) and its effects on students. It is the second in a series of Policy Briefs about ADHD, a disorder characterized by excessive degrees of inattention, impulsivity, and hyperactivity. An earlier brief addressed the legal responsibilities of schools to serve students with ADHD. The third in the series will focus on school-based interventions and accommodations.

* The term behavior as used in this paper, refers strictly to Merriam-Webster's (10th Edition) definitions b and c, meaning "anything an organism does involving action and response to stimulation," and "the response of an individual . . . to (the) environment." It is NOT used to mean conducting oneself properly, as in good or bad behavior.

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sight, foresight, and insight), separate fact from feeling, exercise willpower and self-discipline, analyze and synthesize information, connect actions to consequences, use self-speech to follow rules and regulations, and organize behavior to achieve future goals.[9]

In other words, children with ADHD have a dysfunctional "hold" button. They cannot stop their responses to events and situations long enough to think about and modify what they are saying or doing. They may be able to recite classroom rules, for example, but in the heat of the moment they are unable to stop, think about the rules, and alter their behavior. Therefore, their action in this case results not from willful disobedience but from the inability to apply their skills and knowledge at the "point of performance."[10]

Hallowell and Ratey[11] also view ADHD as a problem of inhibition and disinhibition. They note that individuals with ADHD "don't mean to do the things (they) do, and ... don't do the things (they) mean to do."

What Causes Attention Deficit Disorder?

ADHD may have several different causes.[3,12,13] Most experts, however, believe that it is primarily an inherited, neurobiological disorder. Family studies—especially studies of twins and adopted children—support this position.[14,15] Other causes include external factors such as complications during pregnancy and birth, illness, lead poisoning, injury, and prenatal drug exposure.[3,12,13,15] Researchers have discovered a possible link between ADHD and thyroid disorders that may account for a small percentage of cases.[16,17,18] Regardless of the cause, individuals with ADHD inherit or acquire brains that function differently from those of the general population.[3]

Many studies demonstrate the neurobiological features of ADHD—depressed cerebral glucose metabolism, neurotransmitter deficiencies, abnormal brain wave patterns, and structural differences.[2,3,19] Where the problem originates, however, and how brain systems interact to produce the characteristic behaviors are the focus of ongoing research.

Since most people from time to time appear impulsive, inattentive, or overly active, ADHD may represent one end of a spectrum of neurological variation.[20] Just as normal differences in height and weight are ignored in most social situations, so, too, are neurological differences—unless they precipitate troublesome situations, as is often the case with ADHD.

. . . children with ADHD have a dysfunctional "hold" button. They cannot stop their responses to events and situations long enough to think about and modify what they are saying or doing.

How Does ADHD Affect Children?

ADHD can cause mild to severe impairment. The disorder can be so debilitating that affected students can be accommodated at school under three federal statutes: (1) the Individuals with Disabilities Education Act, Part B [IDEA]; (2) Section 504 of the Rehabilitation Act of 1973; and (3) the Americans with Disabilities Act of 1990 [ADA].[21]

In the school-age ADHD population, boys outnumber girls three to one.[22] Some experts feel that girls may be underdiagnosed, while minorities—especially African Americans and Hispanics—may be overdiagnosed.[24]

ADHD frequently coexists with other learning, behavioral, emotional, and developmental problems.[24] These include learning disabilities—particularly reading, writing, spelling, and math—speech and language disorders, conduct disorder, oppositional defiant disorder, mood disorders, and anxiety disorders. ADHD also affects memory—especially working memory—and organization.[3]

Untreated ADHD can lead to poor self-esteem and poor social adjustment.[23,24,25] Children with ADHD commonly experience interpersonal difficulties and peer rejection, and have been shown to "elicit negative reactions from almost everyone...,"[3] including more negative feedback from teachers.[23,26]

ADHD occurs across all levels of intelligence, yet even bright or gifted children with ADHD may experience school failure.[3] Despite natural ability, their inattentiveness, impulsivity, and hyperactivity often result in failing grades, retention, suspension, and expulsion. Without proper diagnosis, accommodations, and intervention, children with ADHD are more likely to experience negative consequences.

How Does ADHD Affect School Performance?

The neurobiological factors associated with ADHD figure into a child's overall school performance. ADHD characteristics can fluctuate from hour to hour and from day to day, causing a distinctive inconsistency in performance often mistaken for indifference or lack of effort.[3,12] As a result, teachers and parents often tell children with ADHD, "I know you can (do this work, stay in your seat, etc.) because I've seen you do it before." The demands of the situation also affect performance; ADHD symptoms become more obvious on tasks requiring sustained effort, inhibition, organization, and self-regulation.[22]

Brain-imaging studies of adults with ADHD by Zametkin and colleagues at the National Institute of Mental Health revealed significant reductions in the brain's glucose metabolism in "...areas...shown to be involved in the control of attention and motor activity."[26] Zametkin points out that disorders of the affected regions "often result in inattentiveness, distractibility, and an inability to inhibit inappropriate responses." For example, the premotor cortex—one affected area—helps individuals respond voluntarily to external cues, and is crucial for suppressing "relatively automatic responses" to stimuli.[27] Underactivity of this brain region could therefore cause behaviors such as "calling out in class, verbal interruptions, and, in general, acting before thinking."[26]

Deficiencies of neurotransmitters, the brain's chemical messengers, may also play a major role in ADHD behaviors.[19] Researchers have studied one family of neurotransmitters in particular—the catacholamines (norepinephrine and dopamine).[28] These neurotransmitters affect parts of the brain that "(1) regulate motor inhibition and control and (2) project into the areas of the frontal lobes that organize and regulate goal-directed attentive behavior."[29] The frontal lobes, comprising 40 percent of the brain area, are the seat of behaviors such as "developing goal-directed plans (... bringing homework materials home from school)... allocating resources (sitting down and getting busy on homework), and ...inhibiting behaviors that interfere with goal achievement (watching TV)."[1]

ADHD characteristics can fluctuate from hour to hour and from day to day, causing a distinctive inconsistency in performance often mistaken for indifference or lack of effort.

The inability to inhibit impulses and control behavior increases the risk of school failure. The organizational structure of most schools requires that children be able to sit still, remain quiet, work independently, organize and keep track of materials, monitor their time and performance, and follow rules and directions. A child's ability to meet these environmental and situational demands in part determines school success.[30]

Children with ADHD, because of neurological impairment, have difficulty regulating their behavior to meet such demands, yet grading and discipline policies hold them accountable and punish those who do not comply. They need to be taught that they are accountable for their actions, but punishment for academic or social behavior beyond their control is both unhelpful and inappropriate.

How Is ADHD Diagnosed?

No single medical or psychological test for ADHD currently exists. Although researchers have observed neurobiological differences in individuals with ADHD, the procedures used to gather such information are too expensive and too risky, and the results thus far have been too inconclusive, to justify routine testing of children. Instead, diagnosis depends on observing and assessing behavior, the by-product of brain function. Teachers similarly judge student learning by evaluating behavior—through demonstrations of what students know and are able to do—rather than by directly observing the changes in the brain that occur with learning.

Diagnosing ADHD requires a comprehensive, professional assessment. It may be conducted either privately by a physician, psychiatrist, or psychologist, or through the public schools by a qualified professional employed for this purpose. In either case, the individual conducting the assessment uses multiple methods and instruments to gather the information needed for a diagnosis. These usually include (1) interviews with the child's caretakers and the child, if appropri-

ate, to determine the nature and scope of the child's difficulties and to rule out other causes, such as medical, emotional, or family problems; (2) direct observation of the child in various settings; (3) a battery of achievement and psychometric tests; and (4) feedback from parents, teachers, caregivers, and others about the child's behavior across situations.[6]

Parent and teacher observation typically plays a key role in assessment. To gather accurate data about a child's behavior, several behavior rating scales have been developed specifically for ADHD. Parents and teachers observe the child in various settings over a specified time period and use the rating scales to report what they see to the evaluator. The child, depending on his or her age, may be asked to complete similar ratings.

After collecting information from all sources, the professional in charge of assessment analyzes the results to determine if the child's behavior meets diagnostic criteria for ADHD set forth in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). The DSM-IV, published by the American Psychiatric Association, contains guidelines to help psychologists and psychiatrists diagnose mental disorders. To meet DSM-IV criteria, behavior must be maladaptive and inconsistent with the child's developmental level. This distinction is important, since behavior that is normal for a young child may be abnormal for an older child. There must be evidence of clinically significant impairment, and the impairment must be evident in two or more settings, must have been present for at least six months, and must have appeared before age seven.[7]

Some question the validity of these diagnostic procedures and criteria. They caution that ADHD "is so vaguely defined, it is tailor-made for bogus claims."[31] However, the new DSM-IV has narrowed criteria and tightened diagnostic procedures by requiring the impairment to be clinically significant and present in two or more settings.

Concerns about diagnosis may be answered by research now underway at the National Institute of Mental Health to locate a gene responsible for ADHD.[32] If researchers are successful, a blood test could one day confirm the diagnosis of ADHD in many cases, ending some of the suspicion and skepticism surrounding the disorder and current diagnostic methods.

ADHD cannot be cured, but education and treatment can help individuals cope with their disability and succeed at home, school, and work.

Early diagnosis. Early identification and intervention can help children with ADHD avoid negative outcomes in school. To make sure that disabled children are prepared to begin school, Part H of the Individuals with Disabilities Education Act (IDEA) requires that states provide evaluation and early intervention services for infants and toddlers through a multidisciplinary, interagency program. The Preschool Grant Program in Part B of IDEA provides these evaluation and early intervention services to preschoolers. Parts H and B have overlapping Child Find requirements: Part H policies and procedures must be consistent with those set forth in Part B. State departments of education have the responsibility to oversee compliance with Child Find requirements for both Parts H and B.[33]

How Is ADHD Treated?

ADHD cannot be cured, but education and treatment can help individuals cope with their disability and succeed at home, school, and work. Most experts believe that ADHD is best treated through a multimodal approach that involves parents and caretakers, teachers, medical and mental health professionals, and the child. It includes educating parents, teachers, and the child about ADHD; training parents and teachers to use appropriate behavioral and academic interventions at school and at home; applying proper accommodations in the classroom; and providing medication, counseling, and social skills training, if needed.[6,10,13] Effective treatment depends on the collaboration of informed, trained teachers and parents.

Many children with ADHD take medication, especially the stimulants Ritalin, Dexedrine, and Cylert. From 60 to 90 percent of students with ADHD—two to six percent of the entire elementary school population—are treated with stimulant medication.[34] In most children, these medications can provide a short-term decrease in characteristic behaviors—inattention, impulsivity, and hyperactivity; however, they have not been shown to provide long-term benefits (such as improved academic

achievement and social adjustment) or to improve higher-order thinking processes.[34]

The U.S. Department of Education cautions that medication does not replace the need for effective classroom practices that aim to improve learning and achievement. Children with ADHD—medicated or not—benefit most from proper instruction, accommodations, and interventions.[35]

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Is ADHD Something New?

Because ADHD has received lots of media attention recently, many people believe it's something new, or just the latest mental health fad. Actually, only its name and the public's awareness of it are new: symptoms of the disorder have been around for centuries.[11] It has been recognized as a medical condition and reported in the literature since the beginning of this century.[13]

ADHD's present prominence in schools may be due to increased public awareness, greater cognizance of schools' legal responsibilities to serve children whose education is adversely affected by the disorder, and new expectations for all students. First, recent media coverage and articles in professional journals have helped parents and teachers learn more about ADHD. Second, schools have increased efforts to locate, identify, and evaluate all children suspected of having ADHD on the basis of a 1991 memorandum from the U. S. Department of Education[36] clarifying schools' legal obligation. Finally, current school reform efforts have set high standards for all students, including the disabled. Students who once dropped out of school to work on farms or in factories are now expected, with help, to achieve academically and graduate from high school.

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Do Children Outgrow ADHD?

Some children do mature in ways that cause their ADHD symptoms to diminish or disappear. For others, hyperactivity may abate but problems with impulsivity, inattention, and organization remain. Experts dispute the proportion of children for whom maturation is a cure, but most believe that one-third to one-half will continue to have ADHD symptoms as adults.[3] Hallowell and Ratey,[11] however, claim that only one-third of the ADHD population outgrow the disorder.

ADHD is more a performance problem than a lack of knowledge and skills. Children with ADHD cannot apply what they know at the point of performance.

Untreated adults who experience multiple symptoms are "most likely to engage in serious antisocial behavior and/or drug or alcohol abuse."[15] A long-term study has revealed that those who were diagnosed with ADHD as children are—compared to the general population—"disproportionately uneducated, underemployed and plagued by mental problems," and by their early 20's, are "twice as likely to have arrest records, five times as likely to have felony convictions and nine times as likely to have served time in prison."[37]

ADHD's characteristic behaviors can be assets if channeled positively. High energy levels, intensity about ideas and relationships, and affinity for stimulating environments can lead to successful careers as adult.[11,38] Individuals with ADHD may succeed as inventors, writers, artists, designers, or businessmen, or in stimulating but structured careers like fire safety, law enforcement, or the military. One psychiatrist claims that some of the "most prosperous entrepreneurs" have ADHD.[39] A long-term study revealed that almost 20 percent of the subjects with ADHD owned a small business, compared to only five percent of the control group without ADHD.[37]

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Implications for Schools

Based on his theory that ADHD is a disorder of response inhibition, Barkley[22] raises several issues important to decision-makers concerning identification, evaluation, and treatment of ADHD in classroom settings:

- ADHD is best identified by direct, long-term observation of the child in situations demanding sustained effort, inhibition, organization, and self-regulation. School procedures for identifying students with ADHD should allow time to gather adequate information, and should include teacher and parent behavior ratings as well as classroom observations by a professional.
- ADHD is more a performance

problem than a lack of knowledge and skills. Children with ADHD cannot apply what they know at the point of performance.[10] Schools cannot teach, and students cannot learn, how not to have ADHD. Instead, schools must provide modifications and accommodations that help children cope with the disability to improve their performance.

- ADHD is not likely to be detected on traditional academic, intellectual, or psychometric tests, since they are not designed to measure response inhibition and the capacity for self-regulation. Schools need to recognize the profound impairment created by disinhibition in order to understand school failure and choose effective accommodations and modifications.
- ADHD will appear as a discrepancy between intelligence and daily classroom performance, especially the ability to self-regulate behavior. Since certain grading and discipline policies assume the ability to self-regulate behavior, they may be inappropriate for children with ADHD, **unless modifications and accommodations are in place to help the child meet expectations**. Schools can help teachers and students address problem areas through well designed Individualized Education Programs (IEPs) and alternative discipline plans.
- To be effective, treatments for ADHD must be in place where and when behavior occurs. Strategies must prompt desired behaviors, provide immediate feedback and consequences, and be extended over time to maintain desired results. Thus, interventions should be proactive, focusing on prevention of negative behaviors and outcomes as well as providing an appropriate response to behaviors that have already occurred.

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In Conclusion

Many children with ADHD do overcome their disabilities and avoid negative outcomes. Correct diagnosis; early, effective intervention; and parental support are some predictors of long-term success.[17] To help policymakers and practitioners choose policies and practices that help children with ADHD meet education goals and achieve learning standards, the next issue of *Policy Briefs* will review the research on school-based interventions and accommodations.

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Diagnostic criteria for Attention-Deficit / Hyperactivity Disorder (DSM-IV)

A. Either (1) or (2):

(1) six (or more) of the following symptoms of **inattention** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Inattention

(a) often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
(b) often has difficulty sustaining attention in tasks or play activities
(c) often does not seem to listen when spoken to directly
(d) often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
(e) often has difficulty organizing tasks and activities
(f) often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
(g) often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
(h) is often easily distracted by extraneous stimuli
(i) is often forgetful in daily activities

(2) six (or more) of the following symptoms of **hyperactivity-impulsivity** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity

(a) often fidgets with hands or feet or squirms in seat
(b) often leaves seat in classroom or in other situations in which remaining seated is expected
(c) often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
(d) often has difficulty playing or engaging in leisure activities quietly
(e) is often "on the go" or often acts as if "driven by a motor"
(f) often talks excessively

Impulsivity

(g) often blurts out answers before questions have been completed
(h) often has difficulty awaiting turn
(I) often interrupts or intrudes on others (e.g., butts into conversations or games)

B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.

C. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] and at home).

D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.

E. The symptoms do not occur exclusively during the source of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and are not better accounted for by another mental disorder (e.g., Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder).

Types:

Attention-Deficit/Hyperactivity Disorder, Combined Type: if both Criteria A1 and A2 are met for the past 6 months

Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type: if Criterion A1 is met but Criterion A2 is not met for the past 6 months

Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type: if Criterion A2 is met but Criterion A1 is not met for the past 6 months

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800/624-9120
304/347-0487 (FAX)

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